CAAS
Civil Aviation Authority of Singapore

TAKING AVIATION TO GREATER HEIGHTS

Annual Report 2023/24

CONTENTS

Mr Edmund Cheng
Chairman

Mr Han Kok Juan
Director-General

CHAIRMAN AND DIRECTOR-GENERAL'S MESSAGE

In 2023, air passenger traffic continued to recover strongly at Changi Airport with volumes surpassing pre COVID-19 levels by the first quarter of 2024. Our airlines have reported robust performance and at end March 2024, our aviation workforce has returned to pre COVID-19 levels of 35,500. Barring unforeseen circumstances, we expect Singapore's aviation sector to achieve full recovery this year. These results are testament to our strong tripartite partnership and the ability of the Singapore OneAviation community to work together as one ecosystem to rebuild the aviation sector and take Singapore aviation to greater heights.

The future of aviation is bright. The International Air Transport Association expects air passenger volume to double by 2040, with the Asia Pacific a strong region of growth. There are tremendous opportunities for Singapore to ride this wind of growth. In the past year, we took pivotal steps to position the Singapore air hub for the future. We unveiled our vision to redefine the Singapore air hub, one that is sustainable, powered by innovation and committed to developing the next generation of aviation professionals. We anchored our vision in tangible actions, including the launch of the Singapore Sustainable Air Hub Blueprint, the establishment of the International Centre for Aviation Innovation and the transformation of the Singapore Aviation Academy. These are bold and critical ones we must make now, to build a future-ready Singapore air hub for the next generation of Singaporeans.

In 2024, CAAS celebrates its 40th anniversary. We have come a long way in the last 40 years since we were tasked to develop Singapore into an international air hub, connecting Singapore to the world and the world to Singapore. We have had our fair share of challenges, crises, and achievements. Today, Singapore is well-regarded as a leader in aviation in many ways — for our airport and airlines and as an air navigation services provider, and in domains such as aviation safety, aviation training, and aviation sustainability. When we first started, few would have imagined that we would come so far. Our journey could not have been possible without the unwavering support of our aviation stakeholders, colleagues from government agencies, local and international industry partners, and the dedicated service of all our staff, past and present. We thank each one of you for your contribution and for working alongside us to build up Singapore's aviation sector.

As we end a financial year and start a new one, we also wish to thank our outgoing members of the Authority — Professor Chong Tow Chong, Mr Chua Kwan Ping, MG Kelvin Khong, Mr Tan Pheng Hock, Mr Wong Kang Jet and Ms Mary Yeo — for their invaluable contributions and guidance. We warmly welcome our new members — Ms Helen Chen, Ms Audrey Cheong, MG Kelvin Fan, Mr Kong Chi-nang, Mr Kwa Chin Lum, Mr Bernard Lim, Professor Phoon Kok Kwang, Mr Sharael Taha and Mr Yee Ping Yi.

We are pleased to note that with the strong recovery in air traffic in 2023, CAAS has posted a net surplus of $93 million for the financial year ended 31 March 2024 and has $2.7 billion in net assets. We are stepping up our efforts in corporate sustainability. We are committed to supporting GreenGov.SG and Singapore Green Plan initiatives to achieve ambitious sustainability targets in carbon abatement and resource efficiency. We will continue to foster a culture of environmental awareness among our staff and work with stakeholders to effectively manage and reduce environmental impact. We will embrace innovative technologies and practices, invest in renewable energy sources, and implement energy-efficient systems across our facilities.

We look forward to the future with renewed confidence and purpose. The skies are brighter and busier above us. We have seen our aviation sector come together, driven by common passion and determination, to transform the many challenges we face into triumphs. With this same drive, we will seize the new opportunities ahead of us. CAAS will continue to strengthen our collaboration with our stakeholders, industry, and tripartite partners to position the Singapore air hub for the future — one that is at the forefront of aviation, safe, sustainable, connects people and businesses across the world, facilitates the flow of goods and services, and supports the continued growth and prosperity of Singapore.

"The skies are brighter and busier above us. We have seen our aviation sector come together, driven by common passion and determination, to transform the many challenges we face into triumphs. With this same drive, we will seize the new opportunities ahead of us."

Mr Edmund Cheng
Chairman

Mr Han Kok Juan
Director-General

MEMBERS OF THE AUTHORITY

(as at 31 March 2024)

Mr Edmund Cheng
Chairman

Ms Cham Hui Fong
Member

Mr Mark Chong
Member

Prof Chong Tow Chong
Member

Mr Chua Kwan Ping
Member

BG Kelvin Fan
(from 22 Mar 2024)
Member

Mr Han Kok Juan
Member

MG Kelvin Khong
(up to 21 Mar 2024)
Member

Mr Patrick Ky
Member

Prof Lam Khin Yong
Member

Ms Christina Ong
Member

Mr Tan Pheng Hock
Member

Mr Wong Kang Jet
Member

Ms Mary Yeo
Member

THE AUTHORITY'S COMMITTEES

(as at 31 March 2024)

Staff & Remuneration Committee

Chairman	Mr Edmund Cheng
Members	Prof Chong Tow Chong BG Kelvin Fan (from 22 Mar 2024) Mr Han Kok Juan MG Kelvin Khong (up to 21 Mar 2024) Mr Wong Kang Jet
Secretary	Ms Goh Hui Boon

Investment Committee

Chairman	Mr Tan Pheng Hock
Members	Mr Han Kok Juan Ms Christina Ong
Secretary	Ms Chia Sin Yee

Audit and Risk Committee

Chairman	Ms Mary Yeo
Members	Mr Mark Chong Mr Chua Kwan Ping
Secretary	Mr Tan Kwang Wei

Tenders Committee

Chairman	Mr Edmund Cheng
Alternate Chairman	Prof Chong Tow Chong
Members	Ms Cham Hui Fong Mr Han Kok Juan
Alternate Member	Mr Wong Kang Jet
Secretary	Not applicable

Cybersecurity and Data Governance Committee

Chairman	Mr Mark Chong
Members	Mr Baey Chin Cheng Mr Han Kok Juan Mr Keng Seng Wei (from 25 Jan 2024) Prof Lam Khin Yong Mr Tan Pheng Hock Mr Tan Shong Ye (up to 1 Jan 2024) Ms Shirley Wong
Secretary	Mr Ho Kee-Vin

CAAS Buildings and Infrastructure Committee

Chairman	Mr Edmund Cheng
Members	Ms Helen Chen Mr Chow Kok Fong Mr Chua Kwan Ping Mr Han Kok Juan Mr Tan Pheng Hock
Secretary	Mr Peter Wee

CAAS Air Hub Development Advisory Committee (from 1 Feb 2024)

Chairman	Mr Edmund Cheng
Members	Ms Cham Hui Fong Mr Mark Chong Mr Han Kok Juan Mr Mak Swee Wah Mr Ng Chin Hwee Mr Tan Chuan Lye Mr Yacoob Piperdi
Secretary	Ms Angela Ng

PRINCIPAL OFFICERS

(as at 31 March 2024)

Mr Han Kok Juan

Director-General

Mr Tay Tiang Guan

1 Deputy Director-General / Chief Risk Officer

Mr Ng Tee Chiou

2 Deputy Director-General / Singapore's Alternate Representative on the Council of the ICAO

Mr Alan Foo

Senior Director (Safety Regulation Group) / Director (Flight Standards)

Mr Daniel Ng

Senior Director (Aviation Development Group) / Chief Sustainability Officer

Ms Eileen Poh

Singapore's Representative on the Council of the ICAO

Mr Tan Kah Han

Senior Director (Unmanned Systems Group) / Chief Technology Officer

Mr Adrian Chang

Director (Transformation Office)

Mr Chew Choong Cheng

Director (Aerodrome and Air Navigation Services Regulation)

Ms Chia Sin Yee

Director (Finance)

Dr Chong Chun Hon

Chairman (Civil Aviation Medical Board)

Ms Goh Hui Boon

Director (Human Resource)

Mr Ho Kee-Vin

Director (Cybersecurity and Data Governance)

Mr Vincent Hwa

Director (Air Traffic Services)

Mr Sidney Koh

Director (Air Transport)

Ms Kelvina Lim

Director (Legal)

Ms Charmaine Liu

Director (Singapore Aviation Academy) / Director (International Relations)

Mr Loo Chee Beng

Director (Aeronautical Telecommunications and Engineering)

Ms Angela Ng

Director (Aviation Industry) / 2 Director (Capability Development)

Mr Randy Ong

Director (Airport Operations Regulation and Aviation Security)

Mr Maran Paramanathan

Director (Unmanned Systems Policy, Regulations and Operations)

Ms Charmaine Peck

Director (Airport Economic Regulation)

Mr Phua Chai Teck

Director (Airport Development and Planning)

Mr Tan Chun Wei

Director (Unmanned Systems Technology, Engineering and Planning)

Mr Tan Kwang Wei

Director (Internal Audit) / MOT-Family Group Chief Internal Auditor (GCIA)

Ms Lydia Tan

Director (Corporate Communications)

Mr Tan Yean Guan

Director (Air Traffic Management Plans and Development)

Mr Peter Wee

Director (Corporate Development and Emergency Preparedness) / Corporate Secretary

Ms Jean Yee

Director (Airspace Policy)

POSITIONING THE AIR HUB FOR THE FUTURE

> As we emerge from the crisis of a generation, the aviation community must prepare ourselves for the future. To capitalise on the opportunities ahead, we must come together to invest in people, innovation, and sustainability initiatives, so that global aviation can continue to soar…. As an international air hub, Singapore is committed to working with different partners and aviation organisations to build an aviation system for the future.

Mr Chee Hong Tat
Minister for Transport and Second Minister for Finance

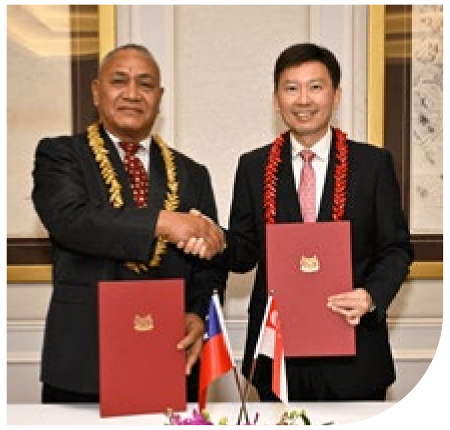
In 2023, we saw a sustained recovery of passenger and cargo volumes. The aviation sector successfully rebuilt its ranks, restoring the aviation workforce fully to pre COVID-19 numbers by end March 2024. While we are optimistic and encouraged by the steady recovery, CAAS continues to keep our focus on tackling the challenges ahead of us — a tightening labour market as the workforce ages, reducing carbon emissions, and intensifying competition. We will continue to leverage Singapore's trusted reputation and strong tripartite partnerships to ensure that our aviation sector has the capacity and capabilities to overcome the challenges and seize opportunities for growth.

ENHANCING HUB CONNECTIVITY

Linking Singapore with the rest of the world

In the year under review, we restored direct links to 14 cities which we were connected to pre COVID-19, bringing our overall connectivity to more than 150 cities in the world. These were served by over 95 scheduled airlines, four of which were airlines that commenced scheduled operations to Changi for the first time.

To further strengthen Singapore's air connectivity with the world, CAAS further expanded its Air Service Agreements (ASAs) with various countries. The expanded ASA with Mongolia in October 2023 allows airlines from Singapore and Mongolia to operate unlimited third and fourth freedom passenger services between both countries, as well as up to 14 weekly passenger services exercising fifth freedom traffic rights between Singapore and Mongolia via any intermediate points, and to any beyond points, with no restrictions on aircraft type or capacity. In February 2024, the ASA with Saudi Arabia was upgraded to strengthen collaboration between the two air hubs, and a new ASA with Samoa was signed to foster greater opportunities for travel, trade, and tourism between the two nations.



Building consensus for wider air transport collaboration

In 2022 – 2023, Singapore assumed Chairmanship of the ASEAN Air Transport Working Group (ATWG). Under Singapore's Chairmanship, sustainability was successfully elevated as a priority for ASEAN through the introduction of Sustainability Forums. Held in conjunction with the ATWG meetings, the Sustainability Forums brought together regulators and industry to share best practices and exchange ideas. The ATWG also developed and adopted the ASEAN Sustainable Aviation Action Plan (ASAAP) and its Work Plan 2023–2024. The ASAAP is an overarching action plan containing high-level milestones for ASEAN in the next decade, while the Work Plan 2023–2024 details activities to be undertaken in the immediate two-year period to support the ASAAP such as the development of the ASEAN Sustainable Aviation Roadmap. ASEAN also progressed key technical discussions to navigate post COVID-19 recovery, such as the development of a single point of reference document for the latest entry protocols of each ASEAN Member State, and finalised the ASEAN Air Navigation Services Master Plan (3rd Edition). Under Singapore's leadership, ASEAN also built consensus for wider air transport collaboration with dialogue partners (China, the European Union, the United States, Japan, and the Republic of Korea) beyond existing air services liberalisation efforts, with a priority on information sharing on consumer protection and automation and innovation in areas such as smart airport technology.

ENSURING AIRPORT OPERATIONS EFFICIENCY

Post COVID-19, the aviation industry was presented with new infrastructural and manpower challenges. Adapting to the evolving conditions, CAAS supported aviation stakeholders in their ramp-up operations to ensure efficiency in airport operations, positive passenger experiences, and optimal resource management. These efforts included process and training redesign, provision of additional manpower support, and implementing innovative technological solutions to cope with the projected increase in passenger and air cargo demands in Changi Airport.

EXPANDING AIRPORT CAPACITY

The completion of expansion works at Changi Airport Terminal 2 (T2) in November 2023 has added capacity of five million passengers per year to Changi's annual capacity, increasing it to 90 million passengers across all four terminals. This will serve the growing volume of passenger traffic before Terminal 5 (T5) is ready.

The design development of Changi Airport T5 is currently underway and on track for construction to commence in 2025. In March 2024, Changi Airport Group (CAG) launched the first major construction tender for T5, i.e. the building's substructure which comprises the foundation and basement works for the new terminal. Works on the T2 Connection (T2C), part of an underground connection linking T2 and T5, also commenced in February 2024. T2C will provide inter-terminal links for passengers and baggage to ensure a seamless connection between T5 and the existing terminals at Changi.

TRANSFORMING THE AVIATION SECTOR

Aligned with the Government's efforts to transform key industry sectors for a more competitive, dynamic economy, the Air Transport Industry Transformation Map (ITM) 2025 was unveiled in August 2023. Developed by CAAS in consultation with industry and unions, the Air Transport ITM lays out strategies to position the Singapore air hub for medium-term growth and provides guidance as the sector looks poised to achieve full recovery post COVID-19.

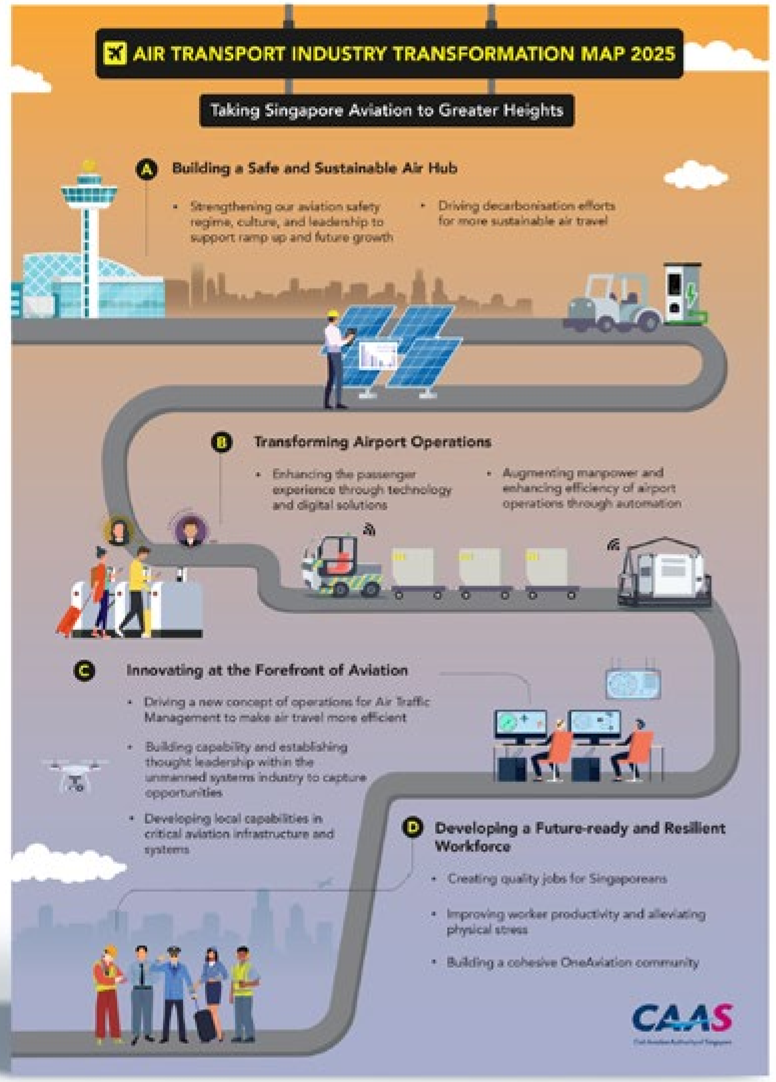
The Air Transport ITM 2025 comprises four key strategies:

STRATEGY 1
Building a Safe and Sustainable Air Hub

STRATEGY 2
Transforming Airport Operations

STRATEGY 3
Innovating at the Forefront of Aviation

STRATEGY 4
Developing a Future-ready and Resilient Workforce



To build up our manpower capabilities, CAAS has commissioned a sector-wide manpower study to map out the current workforce, establish our longer-term workforce needs, as well as identify and quantify the impact of trends and challenges on the workforce in areas such as wage competitiveness, skills relevance, and labour productivity. These insights will help us refine our manpower planning and workforce strategies to better attract, retain, and develop our aviation workforce.

REKINDLING INTEREST IN THE AVIATION SECTOR

Themed "Join Us: Together We Will Take Singapore Aviation to Greater Heights", the OneAviation Careers Fair returned for a second year in August 2023. Organised by CAAS in partnership with the National Trades Union Congress (NTUC), NTUC's e2i (Employment and Employability Institute) and Workforce Singapore, there was strong participation by companies and education institutions, with almost double the number of exhibitors compared to the inaugural run in 2022. Over 10,000 job seekers and aviation enthusiasts attended the fair. This is testament to the confidence in Singapore aviation's future and the great demand for and interest among Singaporeans to join our ranks and take Singapore aviation to greater heights.

CAAS also signed three Memoranda of Understanding (MOU) to expand platforms and avenues to promote aviation to youths in Singapore.

Memorandum of Understanding with the National Youth Council (NYC)

CAAS and NYC will co-develop and promote aviation-related discovery and job experiential activities for youth, create avenues for youth to secure career opportunities in aviation, and provide opportunities for them to develop leadership and cross-sectoral linkages.

Memorandum of Understanding with the Singapore Scout Association (SSA)

CAAS and SSA will drive greater awareness of the diverse aviation career opportunities amongst youth, promote and increase enrolment in the Air Scout co-curricular programme and enhance partnership between Air Scouts and the aviation community.

Memorandum of Understanding with the Singapore University of Technology and Design (SUTD)

CAAS will work with SUTD to catalyse opportunities to develop human capital, technology, and research in the areas of cyber security, unmanned aircraft systems (UAS), and Air Traffic Management (ATM) through internships, public and youth outreach, training programmes, and practical projects.

CAAS showcase at the Singapore Airshow 2024

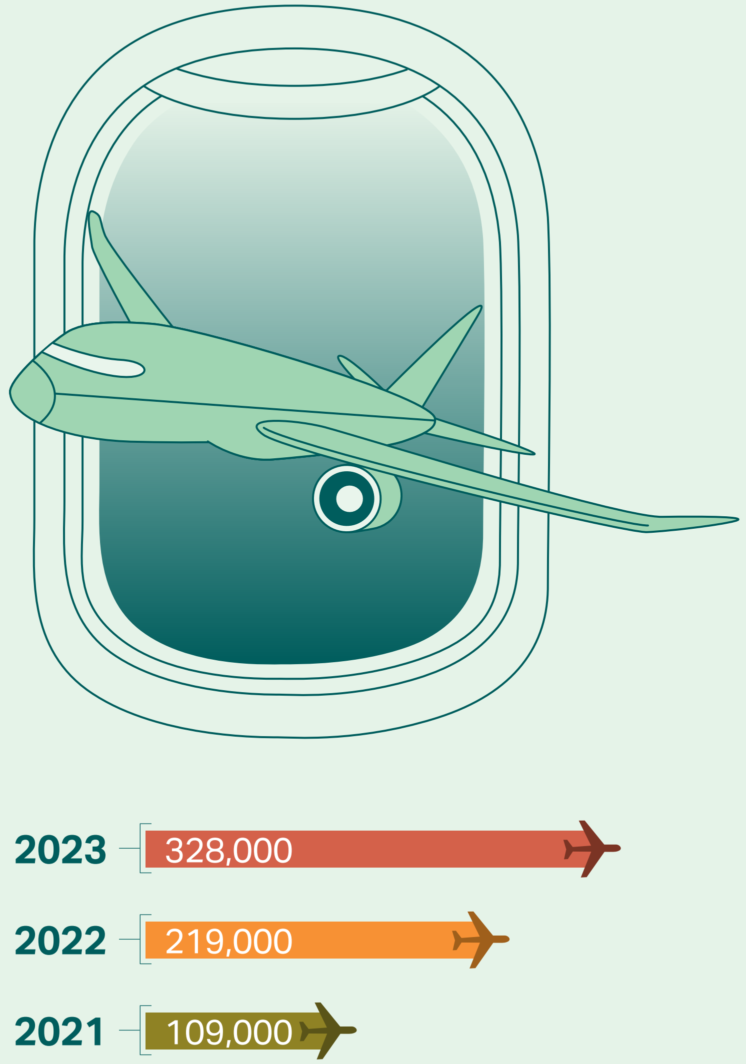
At the Singapore Airshow 2024, held from 20 to 25 February 2024, CAAS rekindled friendships, made new connections, deepened collaborations, and strengthened partnerships. We unveiled how CAAS is redefining the Singapore air hub — one that is sustainable, powered by innovation, and developing the next generation of aviation professionals. We also provided visitors a glimpse into the future Singapore Aviation Academy (SAA) campus.

CHANGI AIRPORT KEY TRAFFIC STATISTICS

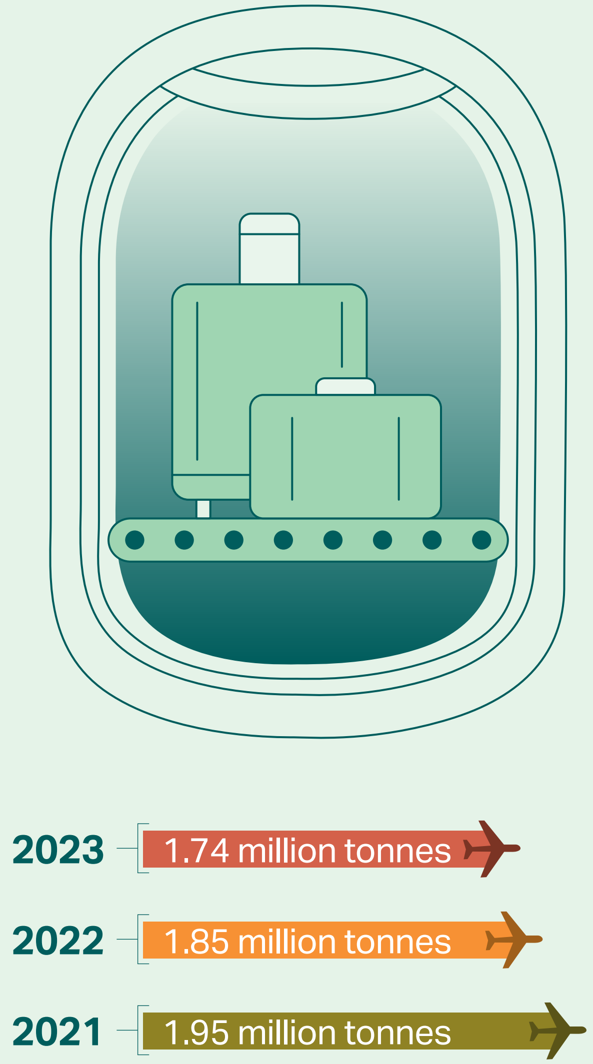
(as at 31 March 2024)

Passenger Movements

Commercial Aircraft Movements



Airfreight Movements



AIR HUB HIGHLIGHTS

New and Expanded ASAs

3 New Passenger Airlines

- TransNusa
- Air Macau
- Aero Dili

1 New Cargo Airline

- Air Incheon

14 Restored City Links

- Addis Ababa
- Ningbo
- Bhubaneswar
- Nottingham
- Changsha
- Okinawa
- Hefei
- Sanya
- Jinan
- Shenyang
- Kaohsiung
- Wuxi
- Nanchang
- Yantai

PRIORITISING AVIATION SAFETY

"When people fly, they put their trust in us — regulators, aircraft manufacturers and airlines — to get them where they need to go, safely. The aviation ecosystem comprises a wide array of companies and workers; CAAS exercises safety oversight over 200 organisations, 220 aircraft and 14,000 personnel. We are highly interconnected. Each of us, in our respective individual and organisational capacity, will have to play our part. Let us take Singapore aviation to greater heights, safely together."

Mr Han Kok Juan
Director-General, CAAS

Safety is the top priority for our aviation sector. In 2023, CAAS continued to support a safe and sustainable recovery of the Changi air hub, including streamlining regulatory processes and reducing regulatory cost burden for the industry while strengthening capabilities across the ecosystem. We made good progress in driving the implementation of the 50 actions under the National Aviation Safety Plan (2022-2024)[1] and are on track to complete all in 2024. With ongoing changes in our operating environment and industry developments, we are ensuring that our regulatory regime remains progressive and robust.

SUPPORTING A SAFE AND SUSTAINABLE RECOVERY OF THE CHANGI AIR HUB

With the increase in operational volumes and changes in operational environment at our airports, we have kept a close watch over our extensive group of regulated entities — comprising Air Operator Certificate holders, the aerodrome operator, Air Navigation Service Provider (ANSP), aeronautical meteorological service provider, maintenance organisations, design and production organisations, training organisations, and licensed personnel. In 2023, CAAS significantly ramped up its regulatory oversight activities, completing over 700 inspections/checks and 230 audits.

These included six detailed audits and inspections on Runway 2 and its associated new taxiways across five months to verify that they comply with local requirements after a period of improvement works. The new taxiways were certified and Runway 2 operations commenced at 0400H on 1 December 2023.

As part of these inspections/checks and audits, CAAS also completed the comprehensive re-certification exercise of Changi and Seletar aerodromes consisting of four audits, one Safety Management Systems assessment, and multiple inspections across seven months. The re-certification exercise aimed to ascertain whether the airport operator, CAG, remained competent to operate and maintain both aerodromes' facilities, equipment, and services in compliance with local requirements.

[1] Singapore's first National Aviation Safety Plan sets out 50 actions the Singapore aviation sector will take over three years from 2022–2024 to further strengthen aviation safety.

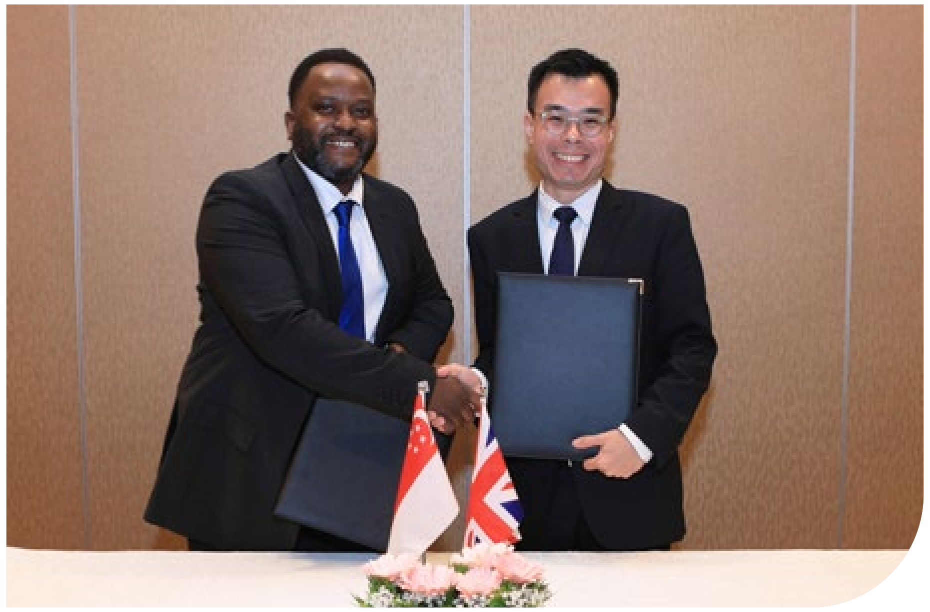
ENSURING OUR REGULATORY REGIME REMAINS PROGRESSIVE AND ROBUST

As part of CAAS' continued efforts to modernise its aviation safety regulatory framework, a comprehensive revision, re-organisation, and streamlining of the regulatory requirements for the ANSP was conducted. This culminated in the promulgation of six sets of Manuals of Standards (MOSes) for Air Navigation Services. Under these restructured MOSes, regulatory requirements for air navigation services were better integrated so that organisational matters such as Safety Management Systems would be addressed holistically by the ANSP while specific services such as Air Traffic Services, Aeronautical Information Services, and Search & Rescue would be provided in accordance with separately packaged requirements. The Code of Practice for Terminal Safety was revised during the year to ensure that the airport licensee continues to meet safety standards in view of increasing and complex demands of airport operations. This enhancement took into account developments in the operating environment and industry practices, lessons from incidents, as well as the outcomes of CAAS' inspections and audits.

CAAS also successfully conducted the Type Acceptance and Entry-Into-Service for the Embraer E190 E2, in support of our industry's growth efforts. The type certificate was accepted on 8 November 2023, signifying the completion of technical reviews between CAAS, the National Civil Aviation Agency – Brazil, and Embraer.

STREAMLINING REGULATORY PROCESSES AND STRENGTHENING CAPABILITIES

In February 2024, on the sidelines of the Singapore Airshow 2024, CAAS signed the following agreements to streamline regulatory processes, reduce the regulatory cost burden for the industry, and strengthen capabilities.



CAAS-UK CAA Technical Arrangement for Airworthiness Certification

CAAS and the Civil Aviation Authority of the United Kingdom of Great Britain and Northern Ireland (UK CAA) signed a Technical Arrangement for Airworthiness Certification to further enhance safety oversight and promote closer sharing of work practices and safety oversight information between the two authorities. Specifically, this agreement seeks to reduce regulatory compliance time and cost for design and production approvals and to facilitate the opening of more aviation business markets for approval holders of both authorities. CAAS and UK CAA will mutually recognise and reciprocally accept or validate each other's design certifications and production approvals. This streamlines regulatory inspections and reduces costs for air operators and industry stakeholders in both countries by eliminating the need for Design Organisation Approval and Production Organisation Approval holders to obtain duplicate approvals from both CAAS and UK CAA to operate in Singapore and the UK.

Singapore-Brazil Memorandum of Understanding to Promote Civil Aviation Safety

CAAS and National Civil Aviation Agency – Brazil signed an MOU to enhance cooperation of regulatory oversight and strengthen in-house capabilities in all areas of aviation safety. The MOU will facilitate the establishment of arrangements for mutual recognition and acceptance of approvals and certificates in the areas of (i) airworthiness certification for mutual recognition of design and production approvals, and (ii) continuing airworthiness of in-service aircraft. The MOU will also strengthen in-house capabilities through exchange of expertise and information. These include (i) aviation safety information sharing for safety enhancement, (ii) capability building and strengthening through joint workshops, and (iii) training and knowledge exchange to deepen the overall competency of the training academies of both parties.

STRENGTHENING OUR AVIATION SECTOR'S SAFETY CULTURE

In 2023, CAAS completed the inaugural aviation sector-wide longitudinal safety culture survey. The survey results provided aviation companies with insights on how safety is perceived, valued, and prioritised by their workers, and served to identify areas for improvement and guide safety enhancement initiatives. Further focus group discussions with industry stakeholders were subsequently conducted from January to February 2024 to deep dive and develop initiatives to address areas of improvement and strengthen the safety culture. CAAS will focus on two key areas: (i) strengthening trust between management and operational staff, and (ii) fostering a positive safety culture among all aviation workers.

CAAS will conduct the sector-wide survey biennially to identify emerging trends and developments in safety culture within the Singapore aviation community.

CAAS APPROVAL HOLDERS

(as at 31 March 2024)

236
Registered Aircraft

4
Air Operator Certificate Holders

2
Certified Aerodromes

155
Maintenance, Repair and Overhaul Organisations

32
Design and Production Organisations

7
Aviation Training Organisations

8
Maintenance Training Organisations

4,049
Flight Crew Licence Holders

2,182
Aircraft Maintenance Licence Holders

515
Air Traffic Controller Licence Holders

TRANSFORMING

AIR TRAFFIC MANAGEMENT

"Global air travel is expected to grow strongly. To support this, we need to build capacity not only on the ground but also in the skies, to be able to manage a higher volume of air traffic safely, efficiently, and sustainably.

Mr Han Kok Juan
Director-General, CAAS"

As air traffic continues to grow in volume and complexity, we are making heavy investments in man, machine, and method to improve what we do and strengthening partnerships with airlines and other ANSPs. These efforts will enable us to better provide safe and efficient air navigation services (ANS), to support the growth of aviation and serve all airspace users.

SUPPORTING AIR TRAFFIC GROWTH AT CHANGI AIRPORT AND THE REGION

Re-opening of Runway 2

Runway 2 (02C/20C) and its adjacent taxiways were reopened from 1 December 2023. The re-opening of Runway 2 represents a crucial step in the transition to a three-runway system at Changi Airport. The infrastructure enhancements carried out on Runway 2 are designed to support the anticipated increase in air traffic movements at Changi Airport, ensuring the airport's continued ability to meet the demands of the aviation industry.

In preparation for the recommencement of runway operations for Runway 2, CAAS worked closely with various airport stakeholders, including CAG and the airlines, to coordinate and implement the necessary measures for a smooth and safe resumption of Runway 2 operations. This collaborative effort underscored the commitment of all parties involved to ensure seamless operations, thereby contributing to Singapore air hub's overall efficiency and safety.

2022 FIR Agreement (FIRA) between Indonesia and Singapore

On 22 March 2024, a significant milestone was reached — the entry into force of the 2022 Agreement between the Government of the Republic of Indonesia and the Government of the Republic of Singapore on the Realignment of the Boundary between the Jakarta Flight Information Region (FIR) and the Singapore FIR (2022 FIRA) and the concurrent delegation of the provision of ANS in a portion of the realigned Jakarta FIR from Indonesia to Singapore.

The entry into force of the 2022 FIRA was a result of close collaboration between CAAS, the Ministry of Transport of Singapore, Directorate General of Civil Aviation (DGCA) Indonesia, and AirNav Indonesia, among other relevant agencies from Indonesia and Singapore. Both countries worked closely to develop coordination procedures and other operational arrangements for the smooth transition, and the safe, orderly, and expeditious flow of air traffic. Intensive technical discussions took place over the past five years between Indonesia and Singapore, underscoring the

commitment of all parties involved in bringing about this significant change to support the current and future needs of Changi Airport and nearby Indonesian airports.

Under the 2022 FIRA, officers from the Indonesian Air Force, DGCA Indonesia, and AirNav Indonesia are stationed at the Singapore Air Traffic Control Centre (SATCC) to facilitate Civil-Military Cooperation in Air Traffic Management (CMAC) between Indonesia and Singapore. The seamless operationalisation of CMAC arrangements was enabled by coordination procedures which were jointly developed between Indonesia and Singapore.

Strengthening Mental Health and Wellness Support

In March 2023, CAAS, the local airlines, and unions adopted a Tripartite Mental Health and Wellness Support Framework for Pilots and Air Traffic Control Officers (ATCOs) aimed at continually strengthening the mental health and wellness support for our pilots and ATCOs. A series of Peer Support Programme (PSP) workshops, tailored for CAAS ATCOs, were conducted to raise mental health education and awareness among ATCOs. This is the first step towards establishing and growing a peer support system amongst operational staff members of CAAS. Over ten sessions were conducted in March 2024. During the workshops, ATCOs were introduced to the basic principles and structures of the PSP. Similar workshops for ATC Support Officers (ATCSOs) are also in the pipeline.

Deepening our Understanding of Global Air Traffic Services

In July 2023, CAAS re-introduced the Familiarisation Flight Programme (FFP) after a long pause during COVID-19. The FFP serves as an excellent platform for our ATCOs to learn and deepen their knowledge through open and candid exchanges with the global community of ATCOs, as well as between ATCOs and pilots. The FFP aims to enhance the professionalism of ATCOs while strengthening the partnership of ATCOs with their peers from other ANSPs and pilots. As part of the programme, ATCOs go on live flights to witness first-hand the working environment of the flight crew in the cockpit. The interaction between officers and the pilots facilitates the sharing of experience and best practices between both parties. In addition, ATCOs visit air traffic control centres and control towers in other cities. In the past year, 44 ATCOs and ATCSOs have visited Bangkok, Kuala Lumpur, Hong Kong, Seoul, and Barcelona.

AIR TRAFFIC MOVEMENTS MANAGED BY CAAS

(as at 31 March 2024)

FY2023/2024

649,000

FY2022/2023

492,000

FY2021/2022

269,000

DECARBONISING

THE SINGAPORE AIR HUB

"Singapore is committed to realising our net zero emissions target by 2050. Our approach is to enable the aviation sector to grow and achieve environmental sustainability concurrently — not choosing one or the other but we want both — so that future generations can continue to enjoy the benefits of flying. We do not see growth and sustainability as mutually exclusive goals; we believe we can achieve both via sustainable growth."

Mr Chee Hong Tat
Minister for Transport and Second Minister for Finance

As global efforts to tackle climate change intensify, the sustainable development of the Singapore air hub will be a key priority for Singapore. We are advancing key initiatives across the three key aviation domains to decarbonise the Singapore air hub, together with industry stakeholders and international partners. Critical enablers will also be put in place to provide the necessary conditions for implementing sustainable aviation initiatives.

SUPPORTING SINGAPORE'S DRIVE TO DEVELOP A SUSTAINABLE AIR HUB

In 2023, CAAS set up a $50 million Aviation Sustainability Programme (ASP) to support Singapore's continued efforts to develop a sustainable air hub. The ASP provides up to 70% funding for sector-wide projects and up to 50% funding for company-level projects. As at 31 March 2024, CAAS has supported several sustainability projects to support our industry's decarbonisation efforts contributing to our 2030 and 2050 targets. These include commissioning the Agency for Science, Technology and Research to conduct a simulation and modelling study, Air-SITEM, to study infrastructural changes needed to support wider electrification of the airside fleet. Additionally, CAG also commenced a feasibility study on the deployment of solar photovoltaic panels on the airfield.

DECARBONISATION ROADMAP FOR THE SINGAPORE AIR HUB

On 19 February 2024, CAAS published the Singapore Sustainable Air Hub Blueprint. The Blueprint serves as a decarbonisation roadmap for the Singapore air hub.

The Singapore Sustainable Air Hub Blueprint adopts a balanced approach to the long-term, sustainable growth of Singapore's aviation sector, taking into account the need for environmental sustainability while ensuring that the Singapore air hub remains competitive.

The Blueprint sets out Singapore's targets to reduce domestic aviation emissions from airport operations by 20% from 2019 levels in 2030 and achieve net zero domestic and international aviation emissions by 2050.

To achieve these goals, 12 initiatives across the airport, airline, and ATM domains will be rolled out to decarbonise the Singapore aviation sector. CAAS will also put in place five enablers to create the conditions for the effective implementation of these initiatives.

REDUCING ENERGY USE AND DEPLOYING RENEWABLES

Solar power deployment

CAAS is committed to working with CAG to increase solar power deployment at Changi and Seletar Airports.

During the year, CAG started work on the largest single-site rooftop solar photovoltaic (PV) system in Singapore. The solar PV system aims to have a combined generation capacity of around 40 Mega-Watt Peak (MWp), of which approximately 38 MWp will be installed on the rooftops of CAG's buildings, including the terminal buildings and cargo agent buildings. The remaining capacity will be generated from solar PV system installed in the airfield, thus maximising solar potential beyond conventional rooftop spaces. With the solar PV system, CAG will reduce its carbon emissions by approximately 20,000 tonnes a year, or about 10% of its consumption in 2019.

Catalysing the adoption of Sustainable Aviation Fuel

The use of Sustainable Aviation Fuel (SAF) is a critical pathway for the decarbonisation of aviation and is expected to contribute around 65% of the carbon emissions reduction needed to achieve net zero by 2050. In November 2023, CAAS, Singapore Airlines, and investment platform company Genzero completed a 20-month SAF pilot programme which found that Singapore was operationally ready to supply SAF though more would be needed to support adoption.

To kickstart the adoption of SAF, CAAS announced the setting of a national SAF target and a SAF levy for air transport users. The use of SAF will be required for flights departing Singapore from 2026, and a SAF levy will be introduced for the purchase of SAF. We will aim for a 1% SAF target for a start, to encourage investment in SAF production and develop an ecosystem for more resilient and affordable supply. Our goal is to raise the SAF target beyond 1% in 2026 to 3–5% by 2030, subject to global developments and the wider availability and adoption of SAF.

CAAS will continue its close consultation with stakeholders on the implementation of the SAF levy before announcing more details in 2025 nearer the date of implementation.

Hydrogen as a potential enabler to Singapore's aviation decarbonisation

On 22 February 2024 at the Singapore Airshow, CAAS, Airbus, CAG, and Linde announced the conclusion of the two-year Singapore Hydrogen Cooperation Committee's technical feasibility study on hydrogen adoption and its infrastructure requirements for aviation. The committee recognised the potential of liquid hydrogen becoming a longer-term decarbonisation pathway for aircraft operations, complementing sustainable aviation fuel in support of the transition towards net zero by 2050.

While the near-term focus is on the wider adoption of sustainable aviation fuels in aircraft operations, hydrogen can potentially play a complementary role as a sustainable energy fuel in the longer term. CAAS has shared some of the key findings from the study with relevant government agencies for longer-term national planning for demand of hydrogen and will continue to monitor the development of hydrogen technology for aircraft operations. The early technical feasibility study undertaken by the committee is useful to ensure that when the technology becomes mature and feasible, Singapore will be well prepared to incorporate liquid hydrogen as part of its aviation decarbonisation strategy.

CONTRIBUTING TOWARDS SUSTAINABLE AVIATION GLOBALLY

To support global aviation decarbonisation efforts, Singapore participates actively in discussions on aviation environmental issues at the International Civil Aviation Organization (ICAO). Our efforts on the international stage are helping to forge consensus among parties and build capabilities and capacities in other countries.

At the Third Conference on Aviation and Alternative Fuels, ICAO and its Member States adopted a Global Framework for SAF, lower carbon aviation fuel, and other aviation cleaner energies, and agreed to a collective global aspiration vision to reduce carbon emissions in international aviation by 5% by 2030. Singapore welcomed the adoption of the framework and vision and CAAS is committed to working with ICAO and other Member States to achieve the goals.

In ASEAN, Singapore forged an agreement on the ASAAP during our two-year chairmanship of the ASEAN ATWG from 2022–2023. The 10-year action plan details milestones and activities and CAAS is working closely with ASEAN Member States and dialogue partners to deliver the ASAAP.

In Singapore, CAAS hosted two Sustainability Roundtables to discuss how the sector could ramp up financing and production of cleaner energy to allow it to reach ICAO's target of net zero emissions by 2050.

- **Aviation Sustainability Roundtable with ICAO Secretary General, Mr Juan Carlos.** Over 10 panellists from the finance and energy sectors in Singapore shared their perspectives on how to support this important transition. Takeaways include the need for us to work collaboratively, plan and start early to allow time to mobilise resources, adopt science-based approaches, and create standardisation to facilitate financing.
- **Sustainability Roundtable at the Singapore Airshow 2024 with ICAO Council President, Mr Salvatore Sciacchitano.** The roundtable brought together ICAO Council President and representatives from the aviation, fuel, and financial sectors sharing expert views on SAF-related matters such as sources of financing and the policy environment needed to encourage SAF investments and accelerate global SAF production.

SINGAPORE'S AVIATION EMISSIONS FOR 2023

Total emissions from airport operations (ktCO2)

318.0

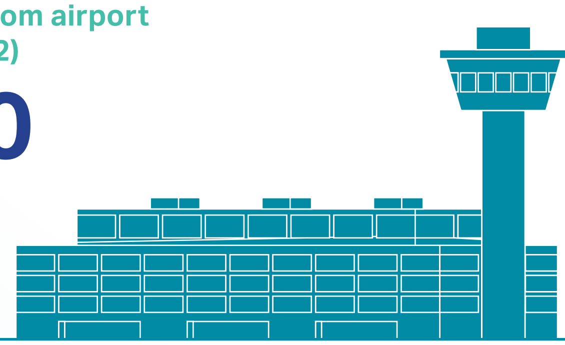


Figure 1: Domestic aviation emissions from Changi and Seletar Airports for calendar year 2023

Total CO2 emissions from international flights (MtCO2)

14.7

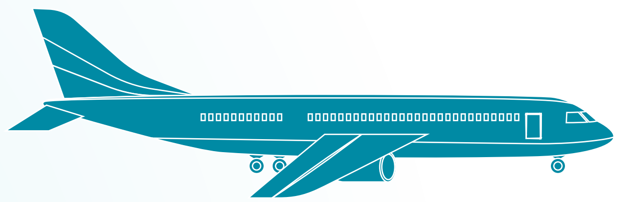


Figure 2: International aviation emissions from Singapore-based operators for calendar year 2023

FOSTERING SAFE AND RESPONSIBLE

UNMANNED AIRCRAFT OPERATIONS

"We hope to foster greater collaboration amongst regulators and with industry to co-design and co-develop rules that would better meet our twin objectives of leveraging technology and ensuring security and public and aviation safety. Such collaboration will also help us streamline and align regulatory processes, speed up approval and adoption across States and support public education and outreach."

Mr Han Kok Juan
Director-General, CAAS

In 2023, we saw a steady growth in the recreational unmanned aircraft (UA) community and an increase in complex commercial UA operations. With UA activities gaining popularity over the years, it is important to ensure that aviation and public safety are not compromised. CAAS takes a strong stance against unlawful UA operations. In 2023, CAAS took enforcement actions against 311 cases of unlawful UA operations. Six individuals and seven companies were prosecuted in court and were fined between $3,000 and $45,000 in 2023. To keep pace with developments in this space, CAAS continues to work closely with regulators and industry partners to encourage innovation to reap the technology's full benefits while ensuring aviation and public safety as well as security.

PROMOTING SAFE AND RESPONSIBLE UNMANNED AIRCRAFT OPERATIONS

To raise awareness on UA regulations, CAAS stepped up public outreach efforts to educate residents living within 5km of Changi Airport, an area which poses the highest risk to airport operations. CAAS worked with the Management Corporation Strata Title of private condominiums within the area to remind residents that they are not allowed to fly their UA in their estate without a permit as doing so will endanger the safety of aircraft operations.

For recreational UA operators, CAAS conducted 12 workshops at the UA Flying Area at Pandan Reservoir, reaching out to 139 participants from educational institutions such as Singapore Polytechnic and Ngee Ann Polytechnic, as well as residents of Ayer Rajah. Launched in July 2022, the dedicated area for the flying of UA and a community space for UA enthusiasts to gather and interact has seen an average of 75 UA operator visits per month.

INNOVATIVE REGULATORY APPROACH TO FACILITATE ADOPTION OF TRANSFORMATIVE TECHNOLOGIES

From 23 May 2023 to 20 June 2023, Singapore played host to The XPRIZE Rainforest Semi-finals, a $10-million competition aimed at driving innovations in autonomous biodiversity assessments in tropical rainforests. In collaboration with several government agencies, CAAS facilitated the use of UA technology for operations such as aerial mapping, sensor deployment, and sample collection. We developed an innovative approach to the approval processes including a simplified airworthiness assessment process coupled with a multi-layered framework to manage the risk of Beyond Visual Line-of-Sight operations. This approach enabled the safe operations of 22 customised UA platforms involving participants from 10 countries. It resulted in the successful testing of technologies by 14 international teams and the identification of over 300 species of plants and animals. CAAS' innovative approach showcased our commitment to safety, innovation, and whole-of-government collaboration. CAAS' contributions not only ensured the success of the XPRIZE competition but also paved the way for future advancements in UA operational assessments, demonstrating our unwavering commitment to driving innovation safely.

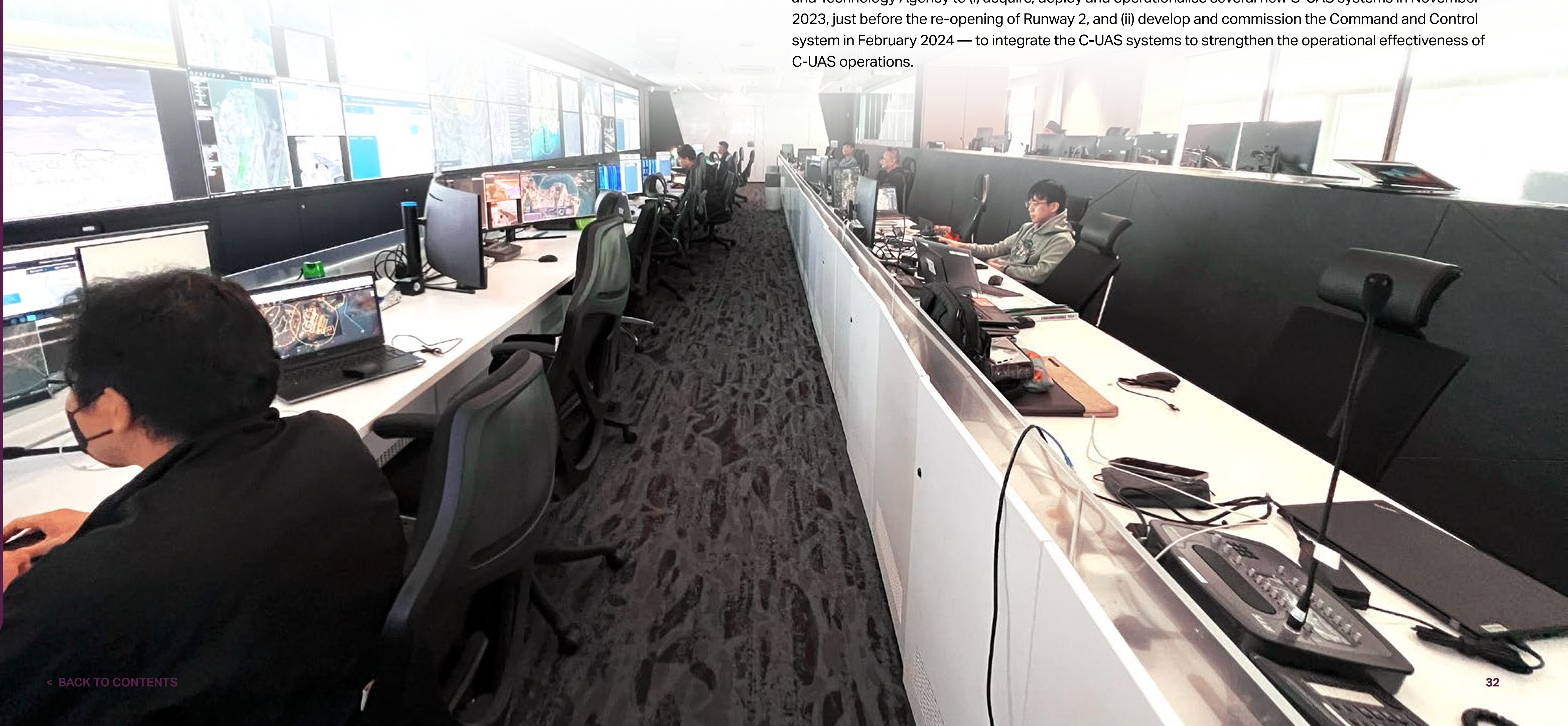
DEVELOPING POLICIES AND REGULATIONS TO KEEP PACE WITH INDUSTRY NEEDS

CAAS is also working with government agencies and industry partners to explore new use cases that can better support industry needs, enhance operational efficiency, and reduce business costs. One example is the development of a new framework to enable UA operations to be conducted over roads. Previously, UA flights over roads were strictly prohibited. An Operator Permit holder needed to land the aircraft, cross the road, and relaunch it to resume UA operations. To ensure safe operations, CAAS worked with the Land Transport Authority to develop a robust framework to assess and mitigate the associated risks for UA flights over roads. The new framework, which came into effect on 1 February 2024, serves to guide UA operators to perform the necessary risk assessment on their intended UA operations over roads and ensure that associated risks are mitigated to the maximum extent possible.

SAFEGUARDING OUR AIRSPACE AGAINST UNAUTHORISED UNMANNED AIRCRAFT OPERATIONS

With Unmanned Aircraft Systems (UAS) and Counter-UAS (C-UAS) technologies making rapid advancements, we are monitoring the developments, enhancing and adapting our capabilities to keep apace. Additionally, CAAS leverages the whole-of-government ecosystem to jointly develop the C-UAS capabilities and associated concepts collaboratively. In July 2023, CAAS conducted a multi-agency C-UAS exercise which involved more than 10 agencies and 100 participants (including members from the Singapore Armed Forces and Singapore Police Force) to validate and drill the Integrated C-UAS Concept of Operations.

CAAS Operations Command and Control Centre continues to conduct 24/7 C-UAS operations to protect Changi Airport against unauthorised UA flights. Of note, CAAS collaborated with CAG and Defence Science and Technology Agency to (i) acquire, deploy and operationalise several new C-UAS systems in November 2023, just before the re-opening of Runway 2, and (ii) develop and commission the Command and Control system in February 2024 — to integrate the C-UAS systems to strengthen the operational effectiveness of C-UAS operations.



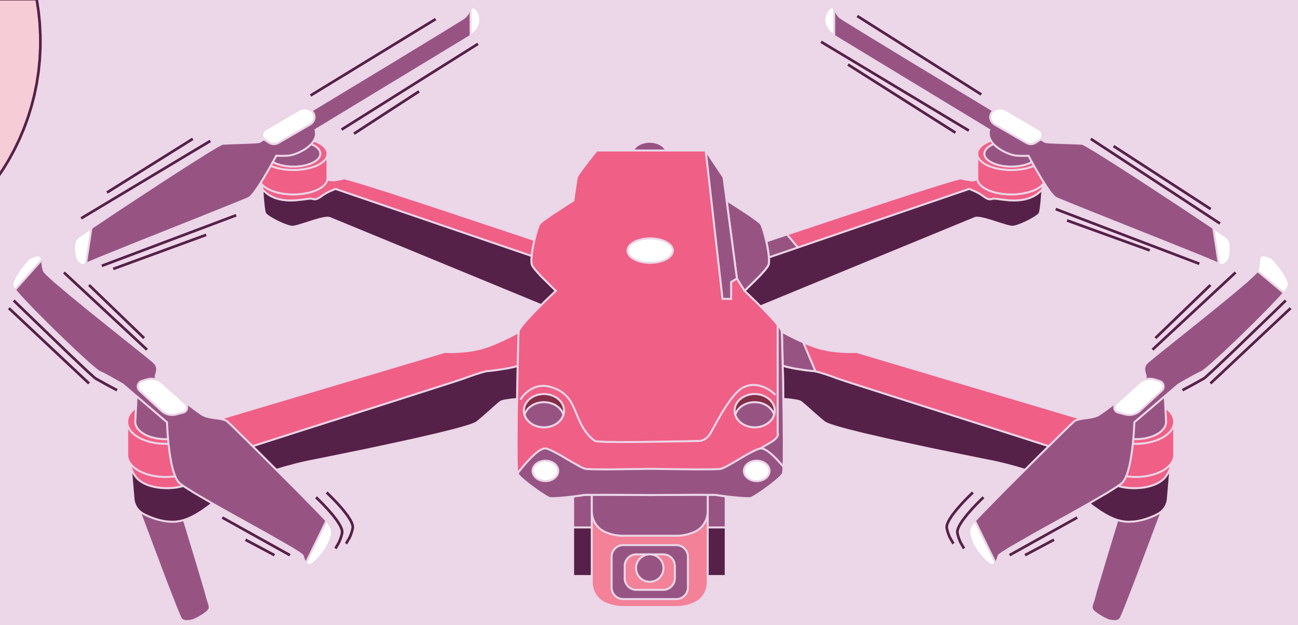
UNMANNED AIRCRAFT (UA) REGISTERED AND APPROVAL HOLDERS

Operator Permit Holders
261
As at 31 Mar 2024

259
As at 31 Mar 2023

Activity Permits Issued
3,257
(from 1 Apr 2023 to 31 Mar 2024)

3,379
(from 1 Apr 2022 to 31 Mar 2023)



UA Basic Training Certificate Holders
2,575
As at 31 Mar 2024

1,801
As at 31 Mar 2023

UA Pilot Licence Holders
1,735
As at 31 Mar 2024

1,376
As at 31 Mar 2023

UA Registered
24,176
As at 31 Mar 2024

18,984
As at 31 Mar 2023

UA Basic Training Organisations
7
As at 31 Mar 2024

6
As at 31 Mar 2023

UA Training & Assessment Organisations
18
As at 31 Mar 2024

18
As at 31 Mar 2023

INNOVATING

AT THE FOREFRONT OF AVIATION

"A future-ready aviation sector will require a strong focus on innovation. This is key for us to seize opportunities in new growth areas and overcome resource constraints, such as land, airspace, manpower, and carbon. The development and deployment of technology in aviation is costly and takes time, given our complex and safety-critical operating environment. Hence, it is even more important to forge close partnerships between the public and private sectors, to pool expertise and resources to drive innovation in a concerted manner."

Mr Chee Hong Tat
Minister for Transport and Second Minister for Finance

To meet rising demand for air travel following COVID-19, the aviation sector will have to address complex and cross-border issues such as airspace capacity constraints, manpower shortages, and the need to decarbonise air travel. Advancements in digitalisation, automation, and clean energy technologies will help address these challenges. CAAS has taken bold steps to drive and guide sectoral research and development (R&D) as well as innovation efforts to enable and facilitate the development and adoption of technologies for the aviation sector.

SECURING FUNDING FOR AVIATION TRANSFORMATION PROGRAMME 2.0

In 2019, CAAS initiated the Aviation Transformation Programme 1.0 (ATP 1.0) to seed the development of new ATM concepts of operations and prototypes including ATM Twin and tools to forecast the impact of weather on ATM. Under ATP 1.0, Artificial Intelligence-based conflict resolution and a platform to optimise across all phases of flight were developed. ATP 1.0 grew local capabilities around airspace/aerodrome modelling and design, open ATM architecture, and designing human-in-the-loop experiments for ATCO tools. It also built up a local ecosystem of research institutes (RIs) to support the sector's R&D needs.

In May 2023, CAAS secured $145 million from Singapore's National Research Foundation for the Aviation Transformation Programme 2.0 (ATP 2.0) Stage 1. ATP2.0 will develop new ATM capabilities as well as mature capabilities developed in ATP1.0. The continued investment in ATM R&D will ensure that Singapore remains at the forefront of ATM innovation and will be able to handle the anticipated air traffic growth efficiently and safely.

ESTABLISHMENT OF INTERNATIONAL CENTRE FOR AVIATION INNOVATION

In January 2024, the International Centre for Aviation Innovation (ICAI) set up by CAAS was launched. Mr Han Kok Juan, Director-General of CAAS was appointed Chair of the ICAI's Board and Mr Patrick Ky was appointed as its founding Chief Executive Officer.

ICAI will focus on the Asia Pacific region, undertaking R&D in key areas of aviation[2], translate research for operational use, and develop capabilities for the aviation ecosystem. To support interoperability across different standards, ICAI will adopt a vendor-agnostic approach and develop solutions with open architecture principles. ICAI will partner governments, industry, and research institutes around the world to pool expertise and resources and co-develop solutions covering next generation air navigation services, automated and smart airport, unmanned aircraft systems, and sustainable aviation.

To help kickstart the ICAI's work on advancing next generation air navigation services, ICAI will manage the $145 million fund under ATP 2.0 Stage 1 to develop new concepts of operations and prototypes, enhance our ecosystem of RIs, and train researchers, scientists, and engineers.

ADVANCING FUTURE CONCEPT OF OPERATIONS

With the Asia Pacific region seeing strong growth in air traffic, it is crucial to develop and trial new concepts to optimise enroute and terminal air traffic handling capacities and enable seamless air navigation services regionally.

Establishment of first ANSP Committee in Asia Pacific

In 2023, the Asia and Pacific (APAC) ANSP Committee was set up to enhance collaboration among all 43 ANSPs in Asia Pacific. This is the first of such committees in the world.

The committee's first meeting was held in April 2023 in Bangkok, with CAAS Director-General Mr Han Kok Juan elected as the inaugural Chairperson. With the Asia Pacific region seeing strong growth in air traffic, the Committee agreed that ANSPs in the diverse region have to work more closely together and leverage technology to improve the provision of ANS to make air travel seamless, affordable, and sustainable across the region. The Committee agreed on four priority areas of work – (i) Step up and coordinate investments in capacity and capabilities, (ii) Accelerate the development and implementation of seamless air navigation services and collaborate on sustainability initiatives, (iii) Collaborate on business continuity and contingency planning, and (iv) Support the operations of oceanic ANSPs.

[2] The ICAI will drive innovation in four key vertical domains (i) Next Generation Air Navigation Services, (ii) Automated & Smart Airport, (iii) Unmanned Aircraft Systems, and (iv) Sustainable Aviation.

Making Multi-regional Trajectory-Based Operations a reality

Multi-regional Trajectory-Based Operations (TBO) is expected to fundamentally change the way air traffic is managed. It could play a vital role in improving safety and efficiency, minimising delays and disruptions while cutting travel cost and time, and reducing fuel burn and carbon emissions. In 2023, CAAS and the ANSPs of Japan, Thailand, and the United States successfully conducted the world's first multi-trajectory-based operations demonstration flight using a Boeing 787-10 eco demonstrator Explorer. The flight started from Seattle to Tokyo on 11 June 2023 and landed at Singapore Changi Airport on 13 June 2023 before departing for Bangkok. The demonstration was part of a three-year collaboration programme aimed at reducing carbon emissions, with the potential of cutting an aircraft's additional fuel burn by up to 10%. Following the demonstration flight, the ANSPs and Boeing signed a Joint Declaration to reaffirm their commitment to make TBO a reality worldwide.

On 23 October 2023, the ANSPs from China, Indonesia, Japan, New Zealand, the Philippines, Singapore, Thailand, and the United States, the Civil Air Navigation Services Organisation (CANSO), and the International Air Transport Association (IATA) signed an agreement on the Asia Pacific Trajectory-Based Operations Pathfinder Project to jointly define, develop, and demonstrate TBO for the Asia Pacific region within four years.

Enabling efficient flight paths

While TBO is a long-term endeavour, CAAS and the ANSPs from Indonesia, New Zealand, and Singapore, CANSO, and IATA have also signed an agreement on the South-East Asia–Oceania Implementation of Free Route Operations (FRTO) Project to identify applicable city pairs and flights and validate the use of FRTO between defined cities within a year. Under FRTO, the skies can be treated as an open canvas, where aircraft are allowed the freedom to choose the most efficient and effective path to their destination, reducing the distance travelled, flight time, fuel burn, and emissions. This enables more efficient use of airspace and enhances air traffic flow management. This innovative concept of operations can facilitate more efficient flight trajectories, taking into consideration factors such as weather and airspace closures. In a traditionally structured ATM system, aircraft would have to follow a network of predefined routes akin to highways in the sky.

Regional Collaborative Platform

The Regional Collaborative Platform (RCP) prototype is a cloud-based experimentation platform designed to facilitate the collaborative development of capabilities that support seamless ATM in the Asia Pacific region. It features advanced visualisation and simulation capabilities, enabling users to better understand concepts and help define OEM-agnostic tools for future implementation. Additionally, the RCP is both flexible and scalable, allowing for the integration of new functionalities to test innovative ATM concepts tailored to the region's unique needs.

The RCP aims to support the experimentation of regional collaborative use cases among ANSPs by allowing the sharing of flight information and providing common virtual situation awareness. The RCP will encourage greater collaboration and enable better coordination across ANSPs, the optimisation of flight operations, and an increase in aviation sustainability by promoting practices that reduce carbon emissions.

AUTOMATED AND SMART AIRPORTS

5G aviation testbed launched to raise airside productivity

In 2023, CAAS and Singtel launched a 5G aviation testbed at Singapore Changi Airport Terminal 3's airside. The testbed enables companies operating there to use 5G to trial and adopt new solutions which would help raise productivity for critical airside functions.

Two ongoing projects tapping on the 5G testbed are the tele-operations of autonomous vehicles (AV) and the secure ground transfer of critical flight data between aircraft and its data centres. AV trials for baggage transport had started in 2020 to raise manpower productivity. The 5G testbed allows continuous monitoring of AV operations in real-time using high-definition video streams with low latency and high transmission stability. For the secure ground transfer of flight data, the existing system only allows data transfer to occur when the aircraft is docked at Changi Airport's aircraft stands and when the aircraft is able to connect to the Wi-Fi system. Using the testbed, Singapore Airlines can reduce the long implementation lead-time for data transfer as aircraft parked at adjacent remote stands will also be able to receive data coverage.

The testbed, which has been live since March 2023, will last for two years. CAAS will review the results of the testbed thereafter and study the potential for wide-scale deployment at Changi Airport.

Digital towing application

In June 2023, CAAS, in close cooperation with CAG and SIA Engineering Company, started trials on a proof-of-concept for a digital towing application to improve the efficiency and safety of towing operations at Changi Airport. The digital towing application enables ATCOs to communicate routing instructions via commercial network (i.e. 4G LTE) to the airside towing crew digitally via handheld tablets instead of communicating via Very High Frequency radio communications. This aims to eliminate challenges experienced by ATCOs and the towing operations crew such as radio frequency congestion especially during peak periods, frequency interferences, and potential miscommunication caused by verbal instructions.

The trials were completed successfully in January 2024 with a reduction in communication errors observed and improvements in efficiency and safety. CAAS is now working with relevant stakeholders to operationalise the digital towing application at Changi Airport.

UNMANNED AIRCRAFT SYSTEMS

Catalysing collaboration among regulators and industry

With rapid advancements in Advanced Air Mobility (AAM) and UAS technology, CAAS continued efforts to catalyse collaboration among regulators and industry, pooling expertise and experiences to facilitate the adoption of transformative technologies. We are also driving partnerships to build capabilities and capacities to ensure we stay ahead of the curve.

Inaugural Meeting of Asia-Pacific Regulators on AAM and UAS

CAAS initiated the first-ever Meeting of Asia Pacific Regulators on AAM and UAS and an accompanying engagement with the industry on 9 November 2023 in Singapore. The meeting, attended by 17 Asia Pacific civil aviation authorities and 24 AAM and UAS institutes and companies, sought to foster collaboration among regulators and between regulators and industry to leverage AAM and UAS safely and effectively. The meeting aimed to raise awareness of new technologies and regulatory approaches and practices, facilitate alignment on regulatory approaches and practices, and support the adoption of AAM/UAS policies and regulations.

Second European Union – Asia Symposium on UAS and Urban Air Mobility (UAM)

CAAS also co-organised the second European Union-Asia Symposium on UAS and UAM with the European Union Aviation Safety Agency. Held in Singapore from 7 to 10 November 2023 and attended by over 150 participants, the symposium facilitated further exchanges on the development of regulations for UAS and UAM. Representatives from over 20 civil aviation authorities participated in the four-day symposium to engage researchers and industry players, taking part in panel discussions and workshops and visiting SUTD to experience the R&D of novel technologies by Singapore institutes and companies.

CAAS and Supernal ink strategic partnership

On 20 February 2024, CAAS inked an MOU with Supernal LLC – Hyundai Motor Group's AAM company. The partnership will drive a variety of activities, including developing R&D initiatives, identifying potential use cases, exchanging information to support safety regulatory framework and standards development, and driving public engagement for AAM.

SHAPING

THE FUTURE OF AVIATION

"As we celebrate the 80th year of the Convention on International Civil Aviation — or more widely known as the Chicago Convention — we are pleased to continue with our efforts, to work with ICAO and other global partners to support the training and development of aviation professionals globally, to strengthen our ability to manage new and emerging challenges, and to make aviation more inclusive.

Mr Chee Hong Tat
Minister for Transport and Second Minister for Finance"

Over the past year, CAAS further solidified our position as a key player in the global aviation landscape and reinforced our commitment to shaping the future of aviation. We continued to be active members in nearly 100 ICAO Expert Bodies, while holding leadership positions in over 20 international transport forums. In support of the rebuilding of international civil aviation post COVID-19, CAAS also convened several key events to enable global aviation leaders, policymakers, and technical experts to come together to exchange views and take concrete steps forward together.

CONTRIBUTING TO INTERNATIONAL AVIATION

Eleventh Meeting of the Air Traffic Management Sub-Group of the Asia Pacific Air Navigation Planning and Implementation Regional Group

CAAS hosted the 11th Meeting of the Air Traffic Management Sub-Group (ATM/SG/11) of the Asia Pacific Air Navigation Planning and Implementation Regional Group from 2 – 6 October 2023. This was the first in-person ATM/SG meeting post COVID-19. This significant gathering brought together 122 participants representing diverse States and international organisations.

The annual convening of the ATM/SG serves as a platform for ATM experts from the region to engage in comprehensive discussions on the implementation and provision of efficient ATM within the Asia Pacific region, strengthen community ties, and foster collaboration and knowledge exchange among industry stakeholders.

58th Conference of Directors-General of Civil Aviation, Asia and Pacific Regions (15 – 19 Oct 2023)

The Conference of Directors-General in Civil Aviation, Asia and Pacific Regions is an annual gathering of Asia Pacific Directors-General, with participation from other regions and States, and industry partners. The conference facilitates discussion on key civil aviation issues, such as aviation safety, air navigation, security and facilitation, environmental protection, and economic development of air transport. The conference also serves to enhance coordination of aviation activities in the region and is a useful platform for Singapore to engage our civil aviation counterparts.

CONVENING THOUGHT LEADERSHIP

Changi Aviation Summit 2024

The second Changi Aviation Summit was held from 18 – 19 February 2024, with 127 Directors-General of civil aviation authorities, representatives from ICAO, and industry leaders in attendance. Robust discussions were held on innovative technologies and practices shaping the future of aviation, the need to invest in the next generation of aviation professionals, and efforts to develop pathways towards a more sustainable air hub.

ICAO Air Navigation World 2023

Singapore had the great honour to host ICAO's Air Navigation World – Air Traffic Management Procedures for Today event in Singapore from 23 – 27 October 2023 which attracted over 400 participants from civil aviation authorities, ANSPs, international organisations and industry stakeholders. This was a first-of-its-kind global event to facilitate global ATM implementation and enhance aviation safety, efficiency, and sustainability, through knowledge sharing among participants in plenary sessions, technical sessions and workshops.

DEVELOPING THE NEXT GENERATION OF AVIATION PROFESSIONALS

"Singapore has been a strong supporter of ICAO's efforts in capacity-building for the next generation of aviation professionals. Our investment in SAA and continued partnership with ICAO underscore the importance of developing the next generation of aviation professionals, to support not just the Singapore air hub, but also the growth of international aviation.

Mr Chee Hong Tat
Minister for Transport and Second Minister for Finance"

Providing high-quality aviation training to ensure that adequate qualified and competent aviation professionals are available to operate, manage, and shape the future of the international air transport system remains a priority for Singapore.

NEW LEARNING SPACES

On 18 February 2024, Singapore Minister for Transport Mr Chee Hong Tat unveiled a $120 million spatial transformation and learning experience redesign plan for the SAA to create new spaces, strengthen its capabilities, and expand its capacity. The move aims to strengthen SAA's position as a leader in civil aviation training, convenor of global aviation expertise and experience, and thought leader in civil aviation.

SAA will increase its training capacity by 20% and provide an enhanced learning experience for aviation professionals at the junior, middle management, and C-suite levels, with technology-enabled classrooms and more networking and informal learning spaces. The new SAA building will also provide new community and event spaces for the public including a rooftop terrace, a public events hall, and a new aviation gallery.

DEVELOPING DEEP EXPERTISE IN CIVIL AVIATION

SAA has appointed five international and local industry veterans as SAA Senior Fellows to guide curriculum development, personally deliver training programmes targeted at C-suite executives and Directors-General, and mentor SAA scholars. This will enable SAA to focus on developing deep expertise in civil aviation with an international yet uniquely Singaporean practice-oriented approach to differentiate itself from other aviation universities and academies around the world. The enhanced SAA will also see lectures by experts and more collaboration with local and international partners.

STRENGTHENING INTERNATIONAL COLLABORATION

CAAS has continued to strengthen our international collaboration with partners to support the growth of aviation in Singapore and the Asia Pacific region.

- **Memorandum of Understanding with the International Federation of Air Line Pilots' Associations (IFALPA).** On 18 February 2024, CAAS and IFALPA signed an MOU for the two organisations to work together on aviation safety training and competency development. Under the MOU, CAAS and IFALPA will co-develop and co-deliver training programmes and seminars, and workshops for pilots and other safety professionals starting with key topical issues such as runway safety, human factors, and safety culture. CAAS and IFALPA will also build up a pool of instructors and resource persons for these programmes, and leverage existing and establish new outreach platforms to promote aviation safety.
- **Memorandum of Understanding with International Air Transport Association (IATA).** On 19 February 2024, CAAS and IATA signed an MOU to work on various initiatives to support the growth of aviation in Singapore and the Asia Pacific region. Under the MOU, CAAS and IATA will collaborate to (i) advance sustainable aviation, including developing a Sustainable Aviation Fuels accounting and reporting system, (ii) develop and implement a regional training cooperation framework to improve air navigation services performance, (iii) provide operational safety data and expertise to support the identification and mitigation of safety risks, and (iv) develop and provide training courses and assistance to local and international trainees.
- **Memorandum of Understanding with Aviation Administration of Kazakhstan (AAK).** On 19 February 2024, CAAS and AAK signed an MOU to collaborate on aviation training to support the growth of the aviation sector. Under the MOU, Singapore and Kazakhstan will work together on the delivery of in-region, customised aviation training programmes in Kazakhstan that will be open to civil aviation personnel from Kazakhstan and Europe and focus on areas such as aviation safety and aviation management. These programmes will help Kazakhstan build up the next generation of aviation professionals to support its plans to grow airline and airport capacity and establish Kazakhstan as a transport and logistics hub of Central Asia. Both civil aviation authorities will also share knowledge and expertise through regular exchanges and study visits.
- **Memorandum of Understanding with the General Authority of Civil Aviation of Saudi Arabia (GACA).** On 19 February 2024, CAAS and GACA signed an MOU and upgraded their bilateral ASA to strengthen collaboration between the two air hubs. The new CAAS-GACA MOU provides a platform for the two civil aviation authorities to conduct regular exchanges and broad-based technical cooperation in various areas, including civil aviation infrastructure, civil aviation operations and assets management, digitisation of passenger experience, safety, security, and environmental protection, and technology adoption. As part of this cooperation, CAAS and GACA will undertake expert visits to share experience and relevant scientific and technical information. CAAS and GACA will also work together to support training and provide opportunities for participation in projects, jointly organised seminars, conferences, workshops sessions, and training courses.

DEVELOPING NEW WORLD-CLASS TRAINING PROGRAMMES

CAAS continues to work with international and local partners to refresh existing offerings and develop new world-class training programmes.

Singapore-ICAO Next Generation Aviation Professionals Scholarship Programme

On 18 February 2024, Singapore and ICAO signed an MOU on the Singapore-ICAO Next Generation Aviation Professionals Scholarship Programme. This programme aims to provide young aviation professionals around the world aged 35 and below with a foundation on key aviation topics. Scholars will have the opportunity to complete a six-week programme at SAA and an aviation company in Singapore, and will be personally mentored by an SAA Senior Fellow.

ICAO-SAA Directors-General Programme on Aviation Safety

Singapore and ICAO signed a new Annex to the Singapore-ICAO MOU on Cooperation in Leadership and Management Training on 18 February 2024 for SAA to develop and deliver up to seven runs of a refreshed ICAO-SAA Directors-General Programme on Aviation Safety over the next three years. This programme aims to support Directors-General to better manage safety related challenges post COVID-19 and provides a platform for them to network and discuss topical challenges.

IGNITING PASSION IN AVIATION

Discover, Experience, and Play @ SAA

In March 2024, SAA opened its doors to members of public of all ages to learn more about SAA's rich history and Singapore's contribution to international aviation. The three-day event held from 7 – 9 March 2024 drew more than 1,500 attendees.

DEVELOPING NEXT GENERATION OF AVIATION PROFESSIONALS

(1 April 2023 to 31 March 2024)

5 New Programmes

- *23 – 26 May 23*
  ICAO Training Package: Training Managers Course
- *19 – 23 Jun 23*
  Personnel Licensing For Regulators
- *11 Jul 23*
  Air Traffic Safety Electronic Personnel Data Processing (Surveillance)
- *26 – 28 Sep 23*
  FAA-CAAS Safety Management System Recurrent Training
- *4 – 7 Mar 24*
  ICAO Training Package: Safety Management System Assessment and Monitoring

208
Courses Run

121
Countries where participants hail from

3,777
Total Participants

Local Participants: 2,759
International Participants: 1,018

DRIVING A FUTURE-READY CAAS

Our people are our most important assets in delivering our mission as leader in civil aviation and in positioning Singapore's air hub for the future. We are committed to foster a workplace that is future-ready and conducive for our officers, and a culture that is supportive of their well-being and professional growth.

Mr Han Kok Juan
Director-General, CAAS

During the year, we furthered efforts towards fostering a OneCAAS culture, creating a nurturing and conducive workplace, and shaping a future-ready CAAS. These include several initiatives to drive digital transformation and modernise our ICT Infrastructure and systems. We also continued our efforts to build our talent pipeline, while ensuring our employees continue to undertake purposeful work and are provided good prospects and diverse career pathways.

FOSTERING A ONECAAS CULTURE

At CAAS, we believe in creating a nurturing, human-centric workplace. Several initiatives were launched in 2023 to promote self-care and an active lifestyle, improve employee well-being, celebrate achievements and show appreciation, build trust in the workplace, and bring our employees closer together.

Besides launching the Intellect Well-Being and Counselling Programme by the Public Service Division (PSD), CAAS also continued our own efforts to promoting mental well-being at the workplace. Our Wellness Ambassadors championed wellness and provided peer support to their colleagues. CAAS also partnered the Health Promotion Board (HPB) and SportsSG to provide talks and activities to promote self-care and an active lifestyle.

Promote self-care and active lifestyle

- Intellect Well-Being and Counselling Programme by PSD
- National Day Sports Active SG
- HPB Mindfulness Talks
- Wellness Ambassadors Network

Celebrating achievements and showing appreciation

- Inaugural CAAS Appreciation Ceremony
- CAAS Appreciation Movement
- Long-service Awards

Building trust

- Management dialogue sessions with staff
- Management visits to Air Traffic Services units

Bring our employees closer together

- Family Day
- "Bring Kids to Work" Day
- Activity Interest Groups

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CREATING A NURTURING AND CONDUCIVE WORKPLACE

We embarked on a workplace transformation project aimed at enhancing work synergy among staff, enhancing customer experience, integrating operations, and improving the delivery of e-services.

In 2023, CAAS set up its new One-Stop Service Centre, with the relocation of My PEL Hub, the Civil Aviation Medical Examination Centre, CAAS Examinations Centre, and self-service lockers to the basement of T2. The new location made it easier for pilots, licensed aircraft engineers, UA pilot licence applicants, and ATCOs to access our services. We have also re-engineered our service delivery processes, eliminating the typical counter set-up to provide a more personable and comfortable customer experience.

In addition, we started developing functional competencies to guide officers and supervisors in identifying skills gaps and potential career options. This would augment ongoing efforts to equip officers with the know-how to identify relevant functional learning programmes and work assignments to grow capabilities in their professional domains.

DRIVING DIGITAL TRANSFORMATION

During the year, CAAS continued to invest in developing a digital and data-driven workforce through continuous enablement, effective employee outreach and modernising our ICT infrastructure and systems.

Continuous enablement

As part of upskilling, we conducted courses and workshops on design thinking, agile project management, robotic process automation, and digital and data literacy and competencies.

Effective employee outreach

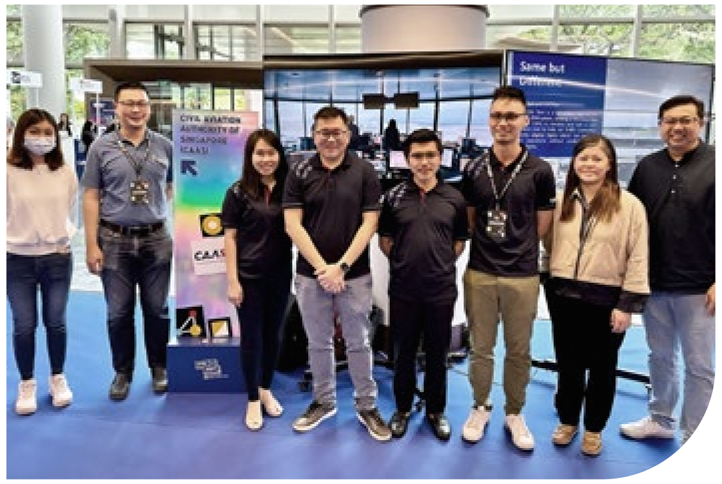
Digital tools and platforms are promoted among our staff and weekly tech tips are provided.

Modernising ICT infrastructure and systems

We successfully migrated the new FlightSG system to the government cloud.

BUILDING OUR TALENT PIPELINE

People are at the core of CAAS' success and CAAS is committed to building a talent pipeline for the next generation of aviation professionals. We actively promote and showcase career and scholarship opportunities. To support a culture of learning and growth, CAAS also launched our refreshed learning strategy to uplift cross-organisational capabilities in people management, professional development, and workplace effectiveness.



CAREER FAIRS

- Career fairs organised by various institutions of higher education, e.g. Career talks on air traffic control at Republic and Temasek Polytechnics to interest Aviation Management and Aerospace Engineering students in careers at CAAS
- CAAS Booth at OneAviation Careers Fair 2023
- CAAS HR Booth at Singapore Airshow 2024

BUILDING A STRONG STEM FOUNDATION

In 2023, CAAS launched the Science, Technology, Engineering and Mathematics (STEM) Postgraduate and Undergraduate Scholarships to build a dedicated pipeline of talents to helm key engineering and technology positions. Under the scholarship, scholars will pursue STEM-related programmes at local or overseas universities before returning to CAAS to build a strong foundation in their STEM expertise through meaningful postings.

CAAS also established a STEM taskforce to identify and deliver strategies to attract, professionalise, and retain STEM talents in CAAS by supporting them in growing identified and emerging technical competencies and capabilities.

SUSTAINABLE
WORKPLACE

CAAS' COMMITMENT TO CORPORATE ENVIRONMENTAL SUSTAINABILITY

CAAS is dedicated to advancing corporate environmental sustainability.

We advocate Corporate Social Responsibility (CSR) practices that benefit our workforce, the aviation community, and the environment in which we operate. Our corporate sustainability efforts are integrated into our CSR framework, which is aligned with four core pillars: Environment, Governance, Community, and Workforce.

We are committed to supporting the initiatives and targets of GreenGov.SG and the Singapore Green Plan, to achieve ambitious sustainability goals in carbon reduction and resource efficiency. This includes embracing innovative technologies, adopting environmentally-friendly practices in our business activities as well as investing in renewable energy sources and energy-efficient systems for our facilities. We have commenced sustainability disclosure, which involves monitoring and reporting on our environmental targets and performance while continuously seeking improvements.

CAAS' ENVIRONMENTAL, SOCIAL, AND GOVERNANCE STRUCTURE

AVIATION SECTOR/INDUSTRY-FOCUSED

CAAS Sustainability Office

In 2023, CAAS set up a Sustainability Office and appointed a Chief Sustainability Officer to advance sustainability goals for the Singapore aviation sector. The office serves as the central policy unit for all aviation-related climate change issues and policies, sets the agenda, and ensures effective coordination and implementation across CAAS and the aviation sector. The office also represents Singapore and CAAS on both domestic and international climate change platforms. The office published the Singapore Sustainable Air Hub Blueprint, which serves as a decarbonisation roadmap for the Singapore air hub.

ORGANISATION-FOCUSED

CAAS Corporate Social Responsibility Committee

Responsible to the Director-General, the Director (Corporate Development & Emergency Preparedness) chairs the Corporate Social Responsibility Committee which aims to build collaboration across the organisation to develop coordinated and effective sustainability strategies, including reporting on CAAS' sustainability performance for CAAS premises and operations. The committee liaises with Certified Green Mark Facility Managers to ensure that our office operates in a sustainable and environmentally friendly manner.

CAAS' ENVIRONMENT TARGETS AND PERFORMANCE

Climate change is an urgent global crisis. CAAS is firmly committed to securing a greener future for our people and for the organisation. It is therefore crucial that we adopt best practices in our business activities and operations to cut greenhouse gas emissions, reduce electricity and water consumption, and reduce waste.

Setting of sustainability targets

CAAS sets sustainability targets in line with those established by GreenGov.SG and applicable to all government agencies, as follows:

- *All new buildings and existing buildings which undergo major retrofitting to achieve Green Mark Platinum Super Low Energy standards or equivalent, where feasible.*
- *Improve the Energy Utilisation Index (EUI) by 10% by 2030 from average of 2018-2020 levels.*
- *Improve the Water Efficiency Index (WEI) by 10% by 2030 from the average of 2018-2020 levels.*
- *Improve CAAS Waste Disposal Index (WDI) by 30% by 2030 from 2022 level.*
- *100% of cars to run on cleaner energy by 2035.*
- *Reduce carbon emissions to support Whole-of-Government effort to peak carbon emissions around 2025.*

Cutting greenhouse gas emissions

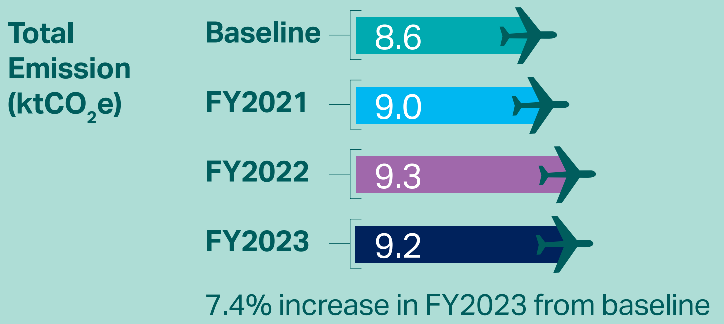
In 2023, CAAS emitted 9.2 $ktCO_2e$ of carbon equivalent, covering both direct emissions owned or controlled by CAAS and indirect emissions from the use of purchased electricity. This represents a rise of 7.4% from the baseline for total emissions, mainly from heightened activities at CAAS operational premises to support post COVID-19 air travel ramp-up.

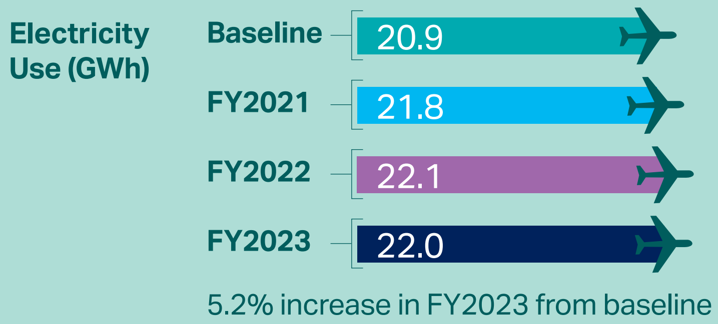
Reducing emissions from electricity use

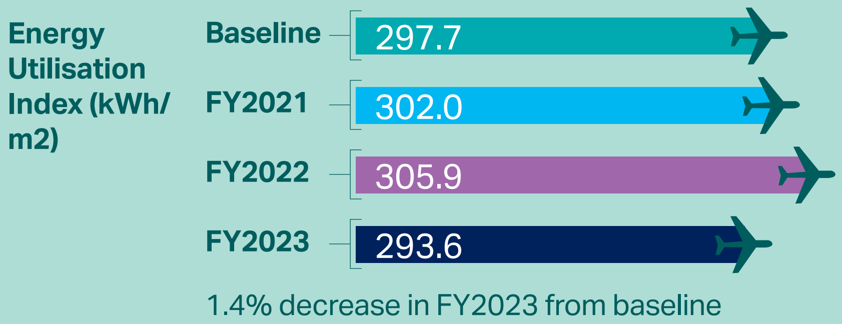
Our carbon emissions are primarily generated through electricity use in our offices and buildings. CAAS has invested in infrastructure enhancement, including adopting the Guaranteed Energy Savings Performance contracting model for chilled water plant retrofits and adopting energy-efficient appliances in our premises. Over the years, our premises have achieved the following:

- Since 2018 – Green Mark Platinum Certification for SAA and Seletar Passenger Terminal Building (SPTB).
- Since 2022 – Green Mark (Healthier Workplace) Gold^PLUS for CAAS Corporate Office.
- December 2022 – Building & Construction Authority Green Mark Platinum Award for the under construction new development at the Singapore Air Traffic Control Centre (SATCC).

CAAS will also carry out addition and alteration works at SATCC, which would include implementation of new mechanical and electrical systems that enhance energy conservation, including a new water-cooled chiller plant with improved operating chiller efficiency of at least 0.68kW/RT.







Clean and renewable energy

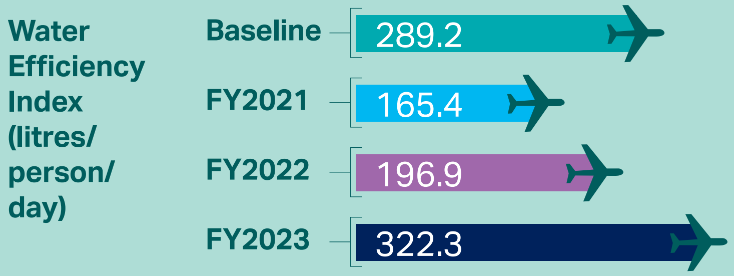
CAAS aims to have 100% of our vehicles running on cleaner energy by 2035, or as and when their Certificate of Entitlement expire, subject to the availability of clean energy models.

We have deployed solar panels at SATCC and will be installing more panels as part of the upgrading of SAA.

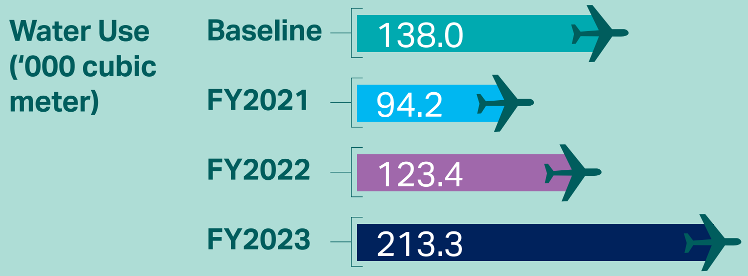
Reducing water usage

CAAS' WEI increased by 11.5% compared to the baseline (i.e. water consumption per person per day had increased). Part of the increase in water use at SAA, for example, could have been due to more frequent Airport Emergency Service training post COVID-19, in which water is used for the physical training activities.

CAAS continuously strives to optimise water consumption and has implemented a robust inspection and maintenance regime using a smart utilities metering system, adopted a 3-ticks rating under the Water Efficiency Labelling Scheme, and removed decorative water features to reduce our water consumption rate.



11.5% increase in FY2023 from baseline

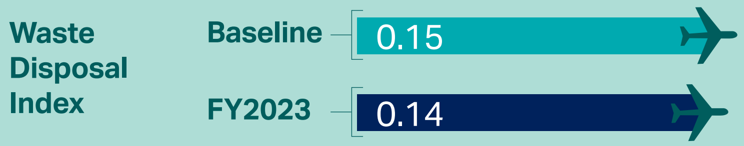


54.5% increase in FY2023 from baseline

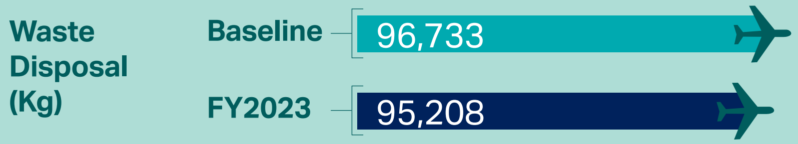
Managing waste effectively

The WDI for CAAS premises decreased by 6.8% compared to the baseline.

CAAS has taken significant steps over the years to reduce waste generation. We reduced paper use by digitising paper-based processes. Centralised utility areas have been established to consolidate printers, further reducing paper usage while more efficiently meeting the printing needs of CAAS officers. Recycling bins have also been strategically installed throughout our facilities. CAAS also actively manages horticultural waste by ensuring that it is collected and recycled appropriately.



6.8% decrease in FY2023 from baseline



1.6% decrease in FY2023 from baseline

FOSTERING A SUSTAINABLE WORKPLACE CULTURE

CAAS is committed to fostering a sustainable workplace culture by implementing green office practices and through partnerships with other organisations. We also strive to nurture care for the environment among our workforce and support initiatives that contribute to community-building.

Engaging our employees

CAAS actively engages our employees to help them understand the importance of going green and caring for the environment.

- Every year, CAAS participates in Earth Hour, joining millions around the globe in the collective effort to combat climate change. As part of this, the non-essential façade lights of the iconic Changi Control Tower and SAA are switched off for an hour to demonstrate our dedication to energy conservation and environmental sustainability. We take this opportunity to encourage our staff to participate in the switch-off event at home, fostering a sense of shared responsibility for our planet's future.
- In 2023, CAAS held two collections of recycled textiles, which were donated to Metta Welfare Association for fundraising efforts to support Arts@Metta, which employs youth artists with special needs. CAAS also regularly partners with Changi Airport to collect old electronic items for upcycling.
- In 2023, like-minded CAAS officers with their families also participated in SG Clean Day, the largest public area clean-up event in Singapore, organised by the National Environment Agency, to make Singapore a cleaner and better home for everyone.

A new lease of life for used furniture

As CAAS undertook renovations for our corporate office, we ensured that old furniture was either recycled or given a new lease of life. Some used furniture was transferred to other government agencies. In December 2023, CAAS further embraced upcycling by donating our office furniture to other organisations, including a significant donation to Tana River Life Foundation, a Singapore-based non-profit organisation dedicated to building schools and improving lives in remote regions overseas.

Appendix A - CAAS sustainability data

The following sustainability dataset covers CAAS and its assets in Singapore[1], including:

- CAAS corporate offices
- ANS infrastructure (e.g. SATCC, Changi Control Tower)
- SPTB
- SAA
- Vehicles owned by CAAS

	GREENHOUSE GASES EMISSION AND ENERGY DATA					WATER DATA		WASTE DATA	
	Electricity ('000 kWh)	EUI[2]	Scope 1 Emission[3] (tCO_2e)	Scope 2 Emission[4] (tCO_2e)	Total Emission (tCO_2e)	Water ('000 m^3)	WEI[5]	Waste (Kg)	WDI[6]
Baseline (FY2018-FY2020)	20,909	297.7	57	8,519	8,576	138.0	289.2	96,733	0.15
FY2021	21,801	302.0	61	8,906	8,967	94.2	165.4		
FY2022	22,084	305.9	90	9,205	9,295	123.4	196.9	96,733	0.15
FY2023	22,006	293.6	36	9,177	9,213	213.3	322.3	95,208	0.14

[1] The assets, which are aligned with the GreenGov.SG scope, are buildings and vehicles owned by CAAS as well as corporate offices rented by CAAS. These exclude the overseas office of the Permanent Mission of Singapore to the International Civil Aviation Organization, office of the International Centre for Aviation Innovation, Changi Airport Group premises and Seletar Tower.

[2] Energy Utilisation Index (EUI) is defined as the total electricity consumed in one year divided by its total gross floor area.

[3] Scope 1 emission refers to direct emissions from sources that are owned by CAAS.

[4] Scope 2 emission refers to indirect emissions that result from the use of purchased electricity.

[5] Water Efficiency Index (WEI) is defined as the water consumption per day divided by the total number of public officer headcount including visitors to the premises.

[6] Waste Disposal Index (WDI) is defined as the total waste disposed of per day divided by the total number of public officer headcount including visitors to the premises.

FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

STATEMENT BY THE AUTHORITY MEMBERS

We, Edmund Cheng and Han Kok Juan, being two of the Authority Members of Civil Aviation Authority of Singapore (the "Authority") and its subsidiary (collectively, the "Group"), do hereby state that, in the opinion of the Authority Members:

(i) the accompanying consolidated financial statements of the Group as set out on page 6 to 63 are drawn up so as to present fairly, in all material respects, the state of affairs of the Group and of the Authority as at 31 March 2024 and the consolidated financial performance, changes in equity and cash flows of the Group and changes in equity of the Authority for the financial year then ended in accordance with the provisions of the Public Sector (Governance) Act 2018 (the "Public Sector (Governance) Act"), the Civil Aviation Authority of Singapore Act 2009 (the "Act") and Statutory Board Financial Reporting Standards;

(ii) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the financial year have been, in all material respects, in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority; and

(iii) the accounting and other records, including records of all assets of the Authority whether purchased, donated or otherwise, have been properly kept.

On behalf of the Authority Members

Edmund Cheng
Chairman

Han Kok Juan
Director-General

Singapore
27 June 2024

INDEPENDENT AUDITOR'S REPORT

MEMBERS OF THE AUTHORITY
CIVIL AVIATION AUTHORITY OF SINGAPORE

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Civil Aviation Authority of Singapore (the "Authority") and its subsidiary (the "Group"), which comprise the consolidated statement of financial position of the Group and the statement of financial position of the Authority as at 31 March 2024, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows of the Group and the statement of changes in equity of the Authority for the year then ended, and notes to the financial statements, including material accounting policy information, as set out on pages 6 to 63.

In our opinion, the accompanying consolidated financial statements of the Group and the statement of financial position and statement of changes in equity of the Authority are properly drawn up in accordance with the provisions of the Public Sector (Governance) Act 2018 (the "Public Sector (Governance) Act"), the Civil Aviation Authority of Singapore Act 2009 (the "Act") and Statutory Board Financial Reporting Standards ("SB-FRS") so as to present fairly, in all material respects, the state of affairs of the Group and the financial position of the Authority as at 31 March 2024 and of the consolidated financial performance, consolidated changes in equity and consolidated cash flows of the Group and of the changes in equity of the Authority for the year ended on that date.

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

Information other than the financial statements and auditor's report thereon

Management is responsible for the other information. The other information obtained at the date of this auditor's report is the Statement by the Authority Members set out on page 1, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do 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 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, 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 this regard.

INDEPENDENT AUDITOR'S REPORT

MEMBERS OF THE AUTHORITY
CIVIL AVIATION AUTHORITY OF SINGAPORE

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the provisions of the Public Sector (Governance) Act, the Act and SB-FRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

A statutory board is constituted based on its constitutional act and its dissolution requires Parliament's approval. 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 there is intention to wind up the Group or for the Group to cease operations.

Those charged with governance's responsibilities include overseeing the Group's financial reporting process.

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.

INDEPENDENT AUDITOR'S REPORT

MEMBERS OF THE AUTHORITY
CIVIL AVIATION AUTHORITY OF SINGAPORE

Auditor's Responsibilities for the Audit of the Financial Statements (cont'd)

- 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 those charged with governance 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.

Report on Other Legal and Regulatory Requirements

Opinion

In our opinion:

(i) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the year are, in all material respects, in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority; and

(ii) proper accounting and other records have been kept, including records of all assets of the Authority whether purchased, donated or otherwise.

Basis for Opinion

We conducted our audit in accordance with SSAs. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Compliance Audit* section of our report. We are independent of the Group in accordance with the 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. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management's compliance.

INDEPENDENT AUDITOR'S REPORT

MEMBERS OF THE AUTHORITY
CIVIL AVIATION AUTHORITY OF SINGAPORE

Responsibilities of Management for Compliance with Legal and Regulatory Requirements

Management is responsible for ensuring that the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority. This responsibility includes monitoring related compliance requirements relevant to the Authority, and implementing internal controls as management determines are necessary to enable compliance with the requirements.

Auditor's Responsibilities for the Compliance Audit

Our responsibility is to express an opinion on management's compliance based on our audit of the financial statements. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Public Sector (Governance) Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority.

Our compliance audit includes obtaining an understanding of the internal control relevant to the receipts, expenditure, investment of moneys and the acquisition and disposal of assets; and assessing the risks of material misstatement of the financial statements from non-compliance, if any, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Because of the inherent limitations in any internal control system, non-compliances may nevertheless occur and not be detected.

Deloitte & Touche LLP

Public Accountants and
Chartered Accountants
Singapore

27 June 2024

STATEMENT OF FINANCIAL POSITION

AS AT 31 MARTCH 2024

	Note	Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
Equity				
Capital account	10	2,181,641	2,181,641	2,180,234
Investment revaluation reserve	11	(2,814)	(2,814)	(5,065)
Accumulated surplus		517,510	517,475	426,539
		2,696,337	2,696,302	2,601,708
Non-current assets				
Property, plant and equipment	12	372,072	372,072	388,841
Right-of-use assets	13	5,482,578	5,482,578	5,559,517
Capital work-in-progress	14	119,584	119,584	102,983
Investment in subsidiary	15	-	-	-
Investment in joint venture	16	42,300	42,300	40,863
Investment in associate	17	13,036	13,036	10,665
Long-term investment	18	150	150	150
Financial assets at fair value through other comprehensive income ("FVTOCI")	19	54,468	54,468	58,684
Other receivables and prepayments	20	19,229	19,229	24,105
		6,103,417	6,103,417	6,185,808
Current assets				
Trade and other receivables and prepayments	20	312,075	312,013	304,981
Financial assets at fair value through other comprehensive income ("FVTOCI")	19	25,519	25,519	13,717
Cash and cash equivalents	21	828,494	828,494	628,063
		1,166,088	1,166,026	946,761
Current liabilities				
Trade and other payables	22	380,892	380,865	314,215
Lease liabilities	23	3,012	3,012	8,829
Contribution payable to Government Consolidated Fund	25	6,670	6,670	-
		390,574	390,547	323,044
Non-current liabilities				
Grants received in advance	24	99,476	99,476	80,858
Lease liabilities	23	4,271	4,271	7,197
Deferred income	26	4,689	4,689	5,098
Deferred capital grants	27	4,065,724	4,065,724	4,105,739
Provision for pension and post-retirement medical benefits plan	28	8,434	8,434	8,925
		4,182,594	4,182,594	4,207,817
Net assets		2,696,337	2,696,302	2,601,708
Changi Airport Development Fund:				
- net assets	34	6,929,697	6,929,697	4,531,963

The accompanying notes form an integral part of the financial statements.

STATEMENT OF COMPREHENSIVE INCOME

YEAR ENDED 31 MARCH 2024

	Note	Group 2023/24 S$'000	Authority 2022/23 S$'000
Income			
Airport and aerodrome licence fee		7,350	6,350
Aviation levy		170,854	89,795
Annual ground rent		75,786	75,694
Fees for airport and related services		319,990	249,870
Aviation training programme fee		7,560	7,108
Certification, examination and licence fee		16,462	15,625
Other operating income		7,146	6,483
	29	605,148	450,925
Expenditure			
Salaries, wages and staff benefits	30	233,715	214,073
Maintenance of buildings and equipment		83,761	70,874
Rental expense		2,764	2,616
Depreciation of property, plant and equipment	12	65,196	52,456
Depreciation of right-of-use assets	13	77,307	77,153
Property tax		24,269	19,964
Services related expenses		58,655	44,719
Grants to industry		25,915	40,456
Other operating expenses		72,306	60,992
		643,888	583,303
Non-operating income, net	31	13,534	10,853
Interest expense on lease liabilities		(199)	(345)
Share of results of joint venture, net of tax	16	1,437	979
Share of results of associate, net of tax	17	2,371	(1,825)
Deficit for the year before government grants		(21,597)	(122,716)
Government grants			
Deferred capital grants amortised	27	58,283	45,692
Operating grants	24	60,955	67,443
		119,238	113,135
Surplus (Deficit) for the year before contribution to Government Consolidated Fund		97,641	(9,581)
Contribution to Government Consolidated Fund	25	(6,670)	-
Net surplus (deficit) for the year		90,971	(9,581)
Other comprehensive income (loss)			
Items that will not be reclassified to profit or loss			
Remeasurement of the pension and post-retirement medical benefit schemes	28	-	(1,111)
Items that may be reclassified to profit or loss			
Net fair value gain (loss) on investments in debt instruments measured at FVTOCI	11	2,251	(1,876)
Total comprehensive income (loss) for the year		93,222	(12,568)

The accompanying notes form an integral part of the financial statements.

STATEMENT OF CHANGES IN EQUITY

YEAR ENDED 31 MARCH 2024

	Note	Capital account	Investment revaluation reserve	Accumulated surplus	Total
		S$'000	S$'000	S$'000	S$'000
Group					
At 1 April 2023		2,180,234	(5,065)	426,539	2,601,708
Net surplus for the year		-	-	90,971	90,971
Other comprehensive income		-	2,251	-	2,251
Total comprehensive income for the year		-	2,251	90,971	93,222
Equity contribution received from Government during the year	10	1,407	-	-	1,407
At 31 March 2024		2,181,641	(2,814)	517,510	2,696,337
Authority					
At 1 April 2022		2,179,741	(3,189)	437,231	2,613,783
Net deficit for the year		-	-	(9,581)	(9,581)
Other comprehensive loss		-	(1,876)	(1,111)	(2,987)
Total comprehensive loss for the year		-	(1,876)	(10,692)	(12,568)
Equity contribution received from Government during the year	10	493	-	-	493
At 31 March 2023		2,180,234	(5,065)	426,539	2,601,708
Net surplus for the year		-	-	90,936	90,936
Other comprehensive income		-	2,251	-	2,251
Total comprehensive income for the year		-	2,251	90,936	93,187
Equity contribution received from Government during the year	10	1,407	-	-	1,407
At 31 March 2024		2,181,641	(2,814)	517,475	2,696,302

The accompanying notes form an integral part of the financial statements.

STATEMENT OF CASH FLOWS

YEAR ENDED 31 MARCH 2024

	Note	Group 2023/24	Authority 2022/23
		S$'000	S$'000
Cash flows from operating activities			
Deficit for the year before government grants		(21,597)	(122,716)
Adjustments for:			
Share of results of joint venture		(1,437)	(979)
Share of results of associate, net of tax		(2,371)	1,825
Depreciation of property, plant and equipment	12	65,196	52,456
Depreciation of right-of-use assets	13	77,307	77,153
Loss on disposal of property, plant and equipment and capital work-in-progress	31	13,687	9
Loss on disposal of financial assets measured at FVTOCI	31	390	421
Foreign exchange loss on financial assets measured at FVTOCI	31	331	312
Interest income	31	(29,685)	(9,843)
Interest expense on lease liabilities		199	345
Provision for pension and post-retirement medical benefits	28	267	107
Amortisation of deferred income	26	(409)	(410)
Amortisation of prepaid lease	20b	409	410
Impairment on trade receivables	20a	47	-
(Write back) Impairment on accrued income	20c	(991)	991
Operating cash flows before changes in working capital		101,343	81
Changes in working capital:			
Trade and other receivables and prepayments		6,091	(52,510)
Trade and other payables		117,612	(27,630)
Pension and post-retirement medical benefits paid		(647)	(470)
Cash generated from (used in) operations		224,399	(80,529)
Interest paid		(199)	(345)
Net cash flows from (used in) operating activities		224,200	(80,874)
Cash flows from investing activities			
Interest received		21,819	4,801
Proceeds from disposal of property, plant and equipment and capital work-in-progress		107	-
Purchase of property, plant and equipment and payment for capital work-in-progress		(78,822)	(52,172)
Purchase of financial assets measured at FVTOCI		(52,724)	(29,013)
Proceeds from disposal of financial assets held at FVTOCI		47,752	26,566
Net cash flows used in investing activities		(61,868)	(49,818)
Cash flows from financing activities			
Repayments of lease liabilities	33	(9,021)	(7,210)
Grants received from Government	33	45,713	134,759
Equity contributions received from Government		1,407	493
Funds held on behalf of Government	21	367	9,303
Net cash flows from financing activities		38,466	137,345
Net increase in cash and cash equivalents		200,798	6,653
Cash and cash equivalents at beginning of year		627,489	620,836
Cash and cash equivalents at end of year		828,287	627,489

The accompanying notes form an integral part of the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

These notes form an integral part of and should be read in conjunction with the accompanying financial statements.

1. DOMICILE AND ACTIVITIES

The Civil Aviation Authority of Singapore (the "Authority") was reconstituted under the Civil Aviation Authority of Singapore Act 2009. The supervisory ministry is the Ministry of Transport. Its principal place of business and registered office is at 4th level, Terminal 2, Singapore Changi Airport, Singapore 819643.

The principal functions and duties of the Authority are:

(a) to regulate safety and promote safety and security in civil aviation and to exercise safety regulatory oversight over civil aviation operations in Singapore and the operation of Singapore aircraft outside Singapore;

(b) to exercise licensing and regulatory functions in respect of the operation of airports and the provision of airport services and facilities in Singapore;

(c) to regulate and promote competition and fair and efficient market conduct in the operation of airports and the provision of airport services and facilities or, in the absence of a competitive market, to prevent the misuse or abuse of monopoly or market power;

(d) to regulate, encourage, promote, facilitate and assist in the use, development and improvement of air services, airports and aerospace industries;

(e) to ensure that there are, provided in every airport (whether by itself or by any airport licensee), adequate and efficient airport services and facilities on such terms as the Authority thinks expedient;

(f) to provide air navigation services within the Singapore Flight Information Region and such other area as the Minister for Transport may authorise;

(g) to provide or coordinate search and rescue services to aircraft in distress within the Singapore Search and Rescue Region;

(ga) to cooperate with the Transport Safety Investigation Bureau of Singapore in relation to investigations under the Transport Safety Investigations Act 2018;

(h) to encourage, promote, facilitate and assist in the development and improvement of civil aviation capabilities, skills and services in Singapore;

(i) to provide technical, consultancy and management services relating to any of the matters referred to in this subsection;

(j) to act internationally as the national authority or body representing Singapore in respect of matters relating to civil aviation;

(k) to discharge or facilitate the discharge of international obligations of the Government as a Contracting State or otherwise in respect of civil aviation;

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

1. DOMICILE AND ACTIVITIES (cont'd)

(l) to collaborate and enter into agreements and arrangements with organisations in respect of any matter relating to civil aviation and any other matter as the Authority thinks expedient;

(m) to foster appropriate education and provide training and training facilities in respect of any matter relating to civil aviation;

(n) to advise the Government on all matters relating to civil aviation;

(o) to promote understanding of civil aviation policies and programmes;

(p) to promote research and development on any matter relating to civil aviation; and

(q) to carry out such other functions and duties as are conferred or imposed on the Authority by or under the Civil Aviation Authority of Singapore Act or any other written law.

The principal activities of the subsidiary, joint venture and associate are disclosed in Notes 15, 16 and 17 respectively.

2. BASIS OF PREPARATION

2.1 *Statement of compliance*

The financial statements have been prepared in accordance with the provisions of the Public Sector (Governance) Act 2018 (the "Public Sector (Governance) Act"), the Civil Aviation Authority of Singapore Act 2009 (the "Act") and Statutory Board Financial Reporting Standards ("SB-FRS"). SB-FRS includes Statutory Board Financial Reporting Standards, Interpretations of SB-FRS and SB-FRS Guidance Notes as promulgated by the Accountant-General. As a statutory board, the Group is required to comply with policies and instructions issued from time to time by the Ministry of Finance ("MOF") and other central government agencies.

2.2 *Basis of measurement*

The financial statements have been prepared on the historical cost basis except as otherwise described in the accounting policies below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

2.3 *Use of estimates and judgements*

The preparation of the financial statements in conformity with the SB-FRS and the Group's accounting policies as described in Note 3 requires management to exercise judgements, make estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenditure. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

2. BASIS OF PREPARATION (cont'd)

2.3 Use of estimates and judgements (cont'd)

Information about critical accounting estimates, assumptions and judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements is included in Note 4.

2.4 Adoption of new and revised standards

On 1 April 2023, the Group has applied all the new and revised SB-FRSs that are mandatorily effective for an accounting period that begins on or after 1 January 2023. Their adoption has not had any material impact on the disclosures or on the amounts reported in these financial statements except as below.

Amendments to SB-FRS 1 and SB-FRS Practice Statement 2: *Disclosure of Accounting Policies*

The Group has adopted the amendments to SB-FRS 1 *Presentation of Financial Statements* for the first time in the current year. The amendments change the requirements in SB-FRS 1 with regard to disclosure of accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The supporting paragraphs in SB-FRS 1 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material.

The Group has applied materiality guidance in SB-FRS Practice Statement 2 in identifying its material accounting policies for disclosures in the related notes. The previous term 'significant accounting policies' used throughout the financial statements has been replaced with 'material accounting policy information'.

Amendments to SB- FRS 8: *Definition of Accounting Estimates*

The Group has adopted the amendments to SB-FRS 8 for the first time in the current year. The amendments replace the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are 'monetary amounts in financial statements that are subject to measurement uncertainty'. The definition of a change in accounting estimates was deleted.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION

3.1 Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Authority and entities (including structured entities) controlled by the Authority and its subsidiaries. Control is achieved when the Authority:

- Has power over the investee;
- Is exposed, or has rights, to variable returns from its involvement with the investee; and
- Has the ability to use its power to affect its returns.

The financial statements of the subsidiaries used in the preparation of the consolidated financial statements are prepared for the same reporting date as the Authority. Consistent accounting policies are applied to like transactions and events in similar circumstances.

All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between the members of the Group are eliminated on consolidation. Consolidation of a subsidiary begins when the Authority obtains control over the subsidiary and ceases when the Authority loses control of the subsidiary.

In the Authority's separate financial statements, investment in subsidiary is accounted for at cost less any impairment in net recoverable value that has been recognised in income or expenditure.

3.2 Joint arrangements

A joint arrangement is a contractual arrangement whereby two or more parties have joint control. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

A joint arrangement is classified either as joint operation or joint venture, based on the rights and obligations of the parties to the arrangement.

To the extent the joint arrangement provides the Authority with rights to the assets and obligations for the liabilities relating to the arrangement, the arrangement is a joint operation.

To the extent the joint arrangement provides the Authority with rights to the net assets of the arrangement, the arrangement is a joint venture.

The Authority recognises its interest in a joint venture as an investment and accounts for the investment using the equity method. The accounting policy for investment in joint venture is set out in Note 3.3.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.3 ***Joint ventures and associates***

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

The results and assets and liabilities of associates or joint ventures are incorporated in these financial statements using the equity method of accounting. Under the equity method, an investment in an associate or a joint venture is initially recognised in the statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

The requirements of SB-FRS 36 *Impairment of Assets* are applied to determine whether it is necessary to recognise any impairment loss with respect to the Group's investment in an associate or a joint venture. When necessary, the entire carrying amount of the investment is tested for impairment in accordance with SB-FRS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount, any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with SB-FRS 36 *Impairment of Assets* to the extent that the recoverable amount of the investment subsequently increases.

The financial statements of the associates and joint ventures are aligned to the same reporting date as the Group. Where necessary, adjustments are made to bring the accounting policies in line with those of the Group.

3.4 ***Functional and presentation currency***

The individual financial statements of each Group entity are measured and presented in the currency of the primary economic environment in which the entity operates (its functional currency). The consolidated financial statements of the Group and the statement of financial position and statement of changes in equity of the Authority are presented in Singapore dollars, which is the functional currency of the Authority and the presentation currency for the consolidated financial statements. All financial information presented in Singapore Dollar has been rounded to the nearest thousand (S$'000), except when otherwise stated.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.4 ***Functional and presentation currency (cont'd)***

In preparing the financial statements of the Group entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recognised at the rates of exchange prevailing on the dates of the transactions. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing at that date.

Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions.

Exchange differences arising on the settlement of monetary items or on translating monetary items at the end of the reporting period are recognised in income or expenditure.

3.5 ***Financial instruments***

Financial assets and financial liabilities are recognised on the statement of financial position when the Group becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition.

(a) *Financial assets*

All regular way purchases or sales of financial assets are recognised and de-recognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Classification

(i) Financial assets held at amortised cost

Debt instruments that meet the following conditions are measured subsequently at amortised cost:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.5 ***Financial instruments (cont'd)***

(a) *Financial assets* (cont'd)

Classification (cont'd)

(ii) Fair value through other comprehensive income ("FVTOCI")

Debt instruments that meet the following conditions are measured subsequently at fair value through other comprehensive income ("FVTOCI"):

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are subsequently measured at fair value through profit or loss ("FVTPL"). Despite the foregoing, the Group may irrevocably designate a debt investment that meets the amortised cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

Amortised cost and effective interest method

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period.

For financial instruments other than purchased or originated credit-impaired financial assets, the effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition. For purchased or originated credit-impaired financial assets, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including expected credit losses, to the amortised cost of the debt instrument on initial recognition.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. On the other hand, the gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.5 ***Financial instruments (cont'd)***

(a) *Financial assets* (cont'd)

Classification (cont'd)

Amortised cost and effective interest method (cont'd)

Interest income is recognised using the effective interest method for debt instruments measured subsequently at amortised cost. For financial instruments other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset.

For purchased or originated credit-impaired financial assets, the Group recognises interest income by applying the credit-adjusted effective interest rate to the amortised cost of the financial asset from initial recognition. The calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit-impaired.

Interest income is recognised in profit or loss and is included in the "non-operating income" line item.

Debt instruments classified as at FVTOCI

The bonds held by the Group are classified as at FVTOCI. Fair value is determined in the manner described in Note 7(a). The bonds are initially measured at fair value plus transaction costs. Subsequently, changes in the carrying amount of these bonds as a result of foreign exchange gains and losses, impairment gains or losses, and interest income calculated using the effective interest method are recognised in profit or loss. The amounts that are recognised in profit or loss are the same as the amounts that would have been recognised in profit or loss if these bonds had been measured at amortised cost. All other changes in the carrying amount of these bonds are recognised in other comprehensive income and accumulated under the heading of investment revaluation reserve. When these bonds are derecognised, the cumulative gains or losses previously recognised in other comprehensive income are reclassified to profit or loss.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.5 ***Financial instruments (cont'd)***

(a) *Financial assets* (cont'd)

Foreign exchange gains and losses

The carrying amount of financial assets that are denominated in a foreign currency is determined in that foreign currency and translated at the spot rate as at each reporting date.

For debt instrument measured at FVTOCI that are not part of a designated hedging relationship, exchange differences on the amortised cost of the debt instrument are recognised in profit or loss in the "non-operating income" line item. As the foreign currency element recognised in profit or loss is the same as if it was measured at amortised cost, the residual foreign currency element based on the translation of the carrying amount (at fair value) is recognised in other comprehensive income in the investment revaluation reserve.

For other financial assets that are not part of a designated hedging relationship, exchange differences are recognised in profit or loss in the "non-operating income" line item.

Impairment of financial assets

The Group recognises a loss allowance for expected credit losses ("ECL") on trade and other receivables. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group recognises lifetime ECL for trade receivables and accrued income. The expected credit losses on these financial assets are estimated based on the Group's historical credit loss experience, assessed individually for each debtor, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition instead of on evidence of a financial asset being credit-impaired at the reporting date or an actual default occurring.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.5 ***Financial instruments (cont'd)***

(a) *Financial assets* (cont'd)

Impairment of financial assets (cont'd)

Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers historical loss rates for each category of customers and adjusts to reflect current and forward-looking macroeconomic factors affecting the ability of the customers to settle the receivables.

The Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if (i) the financial instrument has a low risk of default, (ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and (iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

Definition of default

The Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.5 ***Financial instruments (cont'd)***

(a) *Financial assets* (cont'd)

Impairment of financial assets (cont'd)

Write-off policy

The Group writes off a financial asset when there is information indicating that is no realistic prospect of recovery, e.g. when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings or in the case of trade receivables, when they are over one year past due, whichever occurs earlier.

Measurement and recognition of expected credit loss

For financial assets, the expected credit loss is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate. For a lease receivable, the cash flows used for determining the expected credit losses is consistent with the cash flows used in measuring the lease receivable in accordance with SB-FRS 116 *Leases*.

If the Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Group measures the loss allowance at an amount equal to 12-month ECL at the current reporting date.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the investment revaluation reserve is reclassified to profit or loss.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.5 ***Financial instruments (cont'd)***

(b) *Financial liabilities*

Trade and other payables represent liabilities for goods and services provided to the Group prior to the end of financial year which are unpaid.

Trade and other payables are initially recognised at fair value, net of transaction costs, and are measured subsequently at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis except for short-term payables where the effect of discounting is immaterial.

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost as at each reporting date, the foreign exchange gains and losses are determined based on the amortised cost of the instruments. These foreign exchange gains and losses are recognised in the "non-operating income" line item in profit or loss for financial liabilities that are not part of a designated hedging relationship.

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

(c) *Offsetting of financial instruments*

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when the Group has a legally enforceable right to set off the recognised amounts; and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. A right to set-off must be available today rather than being contingent on a future event and must be exercisable by any of the counterparties, both in the normal course of business and in the event of default, insolvency or bankruptcy.

3.6 ***Property, plant and equipment and capital work-in-progress***

Recognition and measurement

Property, plant and equipment are initially recognised at cost and subsequently carried at cost less accumulated depreciation and accumulated impairment losses.

The cost of an item of property, plant and equipment initially recognised includes its purchase price and any cost that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

The cost of a self-constructed asset includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, and the cost of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.6 Property, plant and equipment and capital work-in-progress (cont'd)

Subsequent cost

Subsequent expenditure relating to property, plant and equipment that has already been recognised is added to the carrying amount of the asset only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repair and maintenance expenses are recognised in income or expenditure when incurred.

Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation is recognised as an expense in income or expenditure on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment, unless it is included in the carrying amount of another asset.

Depreciation is recognised from the date that the property, plant and equipment is installed and ready for use, or in respect of internally constructed assets, from the date that the asset is completed and ready for use.

The estimated useful lives for the current year are as follows:

Buildings	15 to 50 years
Plant and equipment	7 to 20 years
Vehicles	5 to 10 years
Office/other equipment, furniture and fixtures	3 to 8 years
Capital improvements	5 to 20 years

No depreciation is provided on capital work-in-progress as these assets are not yet available for use. Capital work-in-progress is transferred to the various categories of property, plant and equipment and right-of-use assets, and depreciated upon the completion of the capital project.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting period and adjusted if appropriate.

Fully depreciated assets are retained in the financial statements until they are no longer in use.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment. The gain or loss on disposal is recognised net within non-operating income or expenditure.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.7 Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its related cash generating unit ("CGU") exceeds its estimated recoverable amount.

An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use and are largely independent of the cash inflows of other assets or CGU.

The Group's corporate assets do not generate separate cash inflows and are utilised by more than one CGU. Corporate assets are allocated to CGUs on a reasonable and consistent basis and tested for impairment as part of testing of the CGU to which the corporate asset is allocated.

Impairment losses are recognised in income and expenditure.

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.8 Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.9 ***Employee benefits***

Defined contribution plans

The Group makes contributions to the Central Provident Fund scheme in Singapore, a defined contribution pension scheme. Contributions to defined contribution pension schemes are recognised as an expense in the period in which the related service is performed.

Defined benefit plans

The defined benefit liability is the present value of the defined benefit obligation (derived using a discount rate based on government bonds) at the end of the reporting period.

Provision is made for the payment of retirement benefits to those pensionable ex-employees who did not opt for transfer to the Central Provident Fund scheme. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the Projected Unit Credit Method.

Defined benefit costs comprise the following:

- Service costs
- Interest cost on defined benefits liability
- Re-measurements of defined benefit liability

Service costs which include past service costs and gains or losses on non-routine settlements are recognised as expense in income or expenditure. Past service costs are recognised when plan amendment or curtailment occurs.

Interest cost on defined benefit liability is the change during the period in the defined benefit liability that arises from the passage of time which is determined by applying the discount rate based on the Singapore Government bond yield to the defined benefit liability. Interest cost on the defined benefit liability is recognised in income or expenditure.

Re-measurements comprising actuarial gains and losses are recognised immediately in other comprehensive income in the period in which they arise. Re-measurements are recognised in accumulated surplus within equity and are not reclassified to income or expenditure in subsequent periods.

Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.9 ***Employee benefits (cont'd)***

Employee leave entitlement

Employee entitlements to annual leave are recognised when they accrue to employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the statement of financial position date.

3.10 ***Revenue recognition***

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. The Group recognises revenue when it transfers control of a product or service to a customer.

A non-exchange revenue is recognised when the Group receives resources and provide no or nominal consideration directly in return.

Airport and aerodrome licence fee

Licence fee income is recognised on a straight-line basis over the term of the licences.

Aviation Levy

Pursuant to the provisions in the Civil Aviation Group of Singapore (Aviation Levy) Order 2018, the aviation levy is payable and recognised as income upon every air passenger ticket that covers flights that departed from Changi Airport or Seletar Airport.

Aviation Levy is assessed to be a non-exchange revenue under SB-FRS *1001 Accounting and Disclosure for Non-Exchange Revenue*.

Rental income

Rental income is recognised on a straight-line basis over the term of the lease.

Fees for airport and related services

Fees for airport and related services is payable by the airport licensees of Changi Airport and Seletar Airport for services provided by the Group in connection with the airports. The fees for airport and related services are recognised as income as and when the services are rendered by the Group.

Aviation training programme fee

Income is recognised upon the completion of training courses.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.10 Revenue recognition (cont'd)

Certification, examination and licence fee

Certification, examination and licence fee income are collected pursuant to regulatory requirements under the respective legislations. Income is recognised upon the issuance of certificates or licences.

Other service income

Income from services is recognised as and when services are rendered.

Interest income

Interest income is accrued on a time basis, by reference to the principal outstanding and the effective interest rate applicable.

Dividend income

Dividend income from investments is recognised when the Group's right to receive the payment have been established.

3.11 Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attached to them and the grants will be received. Government grants issued for the construction or acquisition of non-current assets are recognised as deferred capital grants in the statement of financial position and transferred to income or expenditure on a systematic and rational basis over the useful life of the related assets. Grants that compensate the Group for expenses incurred are recognised in income or expenditure on a systematic basis in the same period in which the expenses are recognised.

Government grants received but not utilised are included in the "Grants received in advance" account.

3.12 Leases

(a) *As lessee*

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. For these leases, the Group recognises the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.12 Leases (cont'd)

(a) *As lessee (cont'd)*

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses the incremental borrowing rate specific to the Group.

The incremental borrowing rate is defined as the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The Group has determined the incremental borrowing rate specific to each lease to approximate Singapore Government bond yield.

Lease payments included in the measurement of the lease liability comprise fixed lease payments (including in-substance fixed payments), less any lease incentives.

The lease liability is presented as a separate line in the statement of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate; or
- a lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the Group incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognised and measured under SB-FRS 37 *Provisions, Contingent Liabilities and Contingent Assets*. The costs are included in the related right-of-use asset.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented as a separate line in the statement of financial position.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.12 Leases (cont'd)

(a) *As lessee (cont'd)*

The Group applies SB-FRS 36 *Impairment of Assets* to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in Note 3.7.

As a practical expedient, SB-FRS 116 permits a lessee not to separate non-lease components, and instead account for any lease and associated non-lease components as a single arrangement. The Group has not used this practical expedient for certain leases. For such leases where the contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

(b) *As lessor*

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases. When the Group is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the asset arising from the head lease.

Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same bases as rental income. The accounting policy for rental income is set out in Note 3.10.

3.13 Income tax

The Group is a tax-exempted institution under the provisions of the Income Tax Act 1947.

3.14 Club memberships

Club memberships are stated at cost less accumulated impairment losses. Gain or loss on disposal of club membership is determined as the difference between the net disposal proceeds and the carrying amount of the club membership and is accounted for in income or expenditure as they arise.

3.15 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, bank balances and term deposits that are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.16 Related parties

For the purpose of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are subject to common control or common significant influence. Related parties may be individuals or other entities.

The Group is a statutory board under the purview of the Ministry of Transport and is an entity related to the Government of Singapore. Accordingly, the Group's related parties include Government-related entities such as Ministries, Organs of State and other Statutory Boards.

In accordance with Paragraph 25A of SB-FRS 24 *Related Party Disclosures*, the Group is exempted from disclosing transactions and outstanding balances with government-related entities other than Ministries, Organs of State and other Statutory Boards, unless there are circumstances to indicate that these transactions are unusual and their disclosure would be of interest to primary readers of the financial statements.

The Group also applies the exemption in Paragraph 26 of SB-FRS 24. Required disclosures of transactions and related outstanding balances with government-related entities are limited to the following information to enable users of the Group's financial statements to understand the effect of the related party transactions on the financial statements:

(a) The nature and amount of each individually significant transaction with Ministries, Organs of State and other Statutory Boards; and

(b) For other transactions with Ministries, Organs of State and other Statutory Boards that are collectively, but not individually, significant, a qualitative or quantitative indication of their extent.

3.17 Changi Airport Development Fund

The Changi Airport Development Fund (the "Fund") is a fund set up to account for moneys received and disbursed for the specific purpose of expanding Changi Airport. The net assets of the Fund are presented as a line at the bottom of the statement of financial position as prescribed by SB-FRS Guidance Note 3 *Accounting and Disclosures for Trust Funds*. Receipts and expenditure relating to the Fund are accounted for directly in this Fund on an accrual basis. Details of receipts, expenditure, assets and liabilities are disclosed in Note 34.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

3. MATERIAL ACCOUNTING POLICY INFORMATION (cont'd)

3.18 ***Standards issued but not yet effective***

At the date of authorisation of these financial statements, the following amendments to SB-FRS that are relevant to the Group were issued but not yet effective:

Description	Effective for annual periods beginning on or after
Amendments to SB-FRS 1 *Classification of Liabilities as Current or Non-Current*	1 January 2024
Amendments to SB-FRS 1 *Non-current Liabilities with Covenants*	1 January 2024
Amendments to SB-FRS 110 and SB-FRS 28 *Sale or Contribution of Assets between Investor and its Associate or Joint Venture*	Deferred indefinitely

The Group anticipates that the adoption of the above amendments to SB-FRS in the future periods will not have a material impact on the financial statements in the period of their initial adoption.

4. CRITICAL ACCOUNTING ESTIMATES, ASSUMPTIONS AND JUDGEMENTS

The preparation of the Group's consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of income, expenditure, assets and liabilities, and the disclosure of contingent liabilities at the end of each reporting period. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in the future periods. Estimates, assumptions and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

In the process of applying the Group's accounting policies, management is of the opinion that there is no instance of application of judgement which is expected to have a significant effect on the amounts recognised in the financial statements.

Key sources of estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period are discussed below. The Group based its assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

4. CRITICAL ACCOUNTING ESTIMATES, ASSUMPTIONS AND JUDGEMENTS (cont'd)

Defined benefit plans

The cost of defined benefit pension plans and other post-employment medical benefits as well as the present value of the pension obligation are determined using actuarial valuations. The actuarial valuation involves making various assumptions. These include the determination of the discount rates, mortality rates and medical inflation rates. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, defined benefit obligations are highly sensitive to changes in these assumptions. All key assumptions are reviewed at each reporting date. The net benefit liability as at 31 March 2024 is S$9,055,000 (2022/23: S$9,435,000). Further details are provided in Note 28.

5. FINANCIAL INSTRUMENTS

The following table sets out the financial instruments at the end of the reporting period:

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Financial assets			
Financial assets at fair value through other comprehensive income	79,987	79,987	72,401
Financial assets at amortised cost:			
- Cash and cash equivalents	828,494	828,494	628,063
- Trade and other receivables	273,564	273,524	279,975
	1,102,058	1,102,018	908,038
Financial liabilities			
Financial liabilities at amortised cost:			
- Trade and other payables	(204,732)	(204,705)	(123,154)
Lease liabilities	(7,283)	(7,283)	(16,026)

6. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

Overview

The Group is exposed to financial risks arising from its operations and the use of financial instruments. The key financial risks include credit risk, liquidity risk and foreign currency risk.

This note represents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

6. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (cont'd)

Risk management framework

Risk management is integral to the operations of the Group. The Group has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The management continually monitors the Group's risk management process to ensure that an appropriate balance between risk and control is achieved.

(a) *Credit risk management*

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. As at 31 March 2024, the Group's maximum exposure to credit risk, without taking into account any collateral held or other credit enhancements, which will cause a financial loss to the Group due to failure to discharge an obligation by the counterparties arises from the carrying amount of the respective recognised financial assets as stated in the statement of financial position.

The Group has adopted a policy of dealing with creditworthy counterparties and obtaining sufficient collateral where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group manages these risks by monitoring credit-worthiness and limiting the aggregate risk to any individual counterparty. Therefore, the Group does not expect to incur material credit losses on its financial instruments. The Group develops and maintains its credit risk gradings to categorise exposures according to their degree of risk of default. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties.

At the end of the reporting period, the Group has a concentration of credit risk as about 99% (2022/23: 96%) of the trade receivables were due from one of the Group's major customers and related party.

Further details of credit risk on trade and other receivables are disclosed in Note 20.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

6. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (cont'd)

(a) *Credit risk management (cont'd)*

The Group's current credit risk framework comprises the following categories:

Category	Description	Basis for recognising expected credit losses ("ECL")
Performing	The counterparty has a low risk of default and does not have any past-due amounts.	12-month ECL
Doubtful	Amount is > 30 days past due or there has been a significant increase in credit risk since initial recognition.	Lifetime ECL - not credit-impaired
In default	Amount is > 90 days past due or there is evidence indicating the asset is credit-impaired.	Lifetime ECL - credit-impaired
Write-off	Amount is > 1 year past due or there is information indicating that the counterparty has been placed under liquidation or has entered into bankruptcy proceedings, whichever occurs earlier.	Amount is written off

The table below details the credit quality of the Group's financial assets and other items, as well as maximum exposure to credit risk by credit risk rating grades:

Group	Note	External/ Internal credit rating	12-month or lifetime ECL	Gross carrying amount	Loss allowance	Net carrying amount
				S$'000	S$'000	S$'000
31 March 2024						
Trade receivables	20	(i)	Lifetime ECL (simplified approach)	87,357	(47)	87,310
Accrued income	20	(i)	Lifetime ECL (simplified approach)	36,550	-	36,550
Financial assets at fair value through other comprehensive income	19	Performing	12-month ECL	79,987	-	79,987
Grants receivable	20	Performing	12-month ECL	78,403	-	78,403
Sundry receivables (as agent to the Government)	20	Performing	12-month ECL	59,815	-	59,815
Other receivables	20	Performing	12-month ECL	11,486	-	11,486
					(47)	

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

6. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (cont'd)

(a) *Credit risk management (cont'd)*

Authority	Note	External/ Internal credit rating	12-month or lifetime ECL	Gross carrying amount	Loss allowance	Net carrying amount
				S$'000	S$'000	S$'000
31 March 2024						
Trade receivables	20	(i)	Lifetime ECL (simplified approach)	87,357	(47)	87,310
Accrued income	20	(i)	Lifetime ECL (simplified approach)	36,550	-	36,550
Financial assets at fair value through other comprehensive income	19	Performing	12-month ECL	79,987	-	79,987
Grants receivable	20	Performing	12-month ECL	66,914	-	66,914
Sundry receivables (as agent to the Government)	20	Performing	12-month ECL	59,815	-	59,815
Other receivables	20	Performing	12-month ECL	11,446	-	11,446
					(47)	
31 March 2023						
Trade receivables	20	(i)	Lifetime ECL (simplified approach)	82,374	-	82,374
Accrued income	20	(i)	Lifetime ECL (simplified approach)	27,658	(991)	26,667
Financial assets at fair value through other comprehensive income	19	Performing	12-month ECL	72,401	-	72,401
Grants receivable	20	Performing	12-month ECL	43,036	-	43,036
Sundry receivables (as agent to the Government)	20	Performing	12-month ECL	125,824	-	125,824
Other receivables	20	Performing	12-month ECL	2,074	-	2,074
					(991)	

(i) For trade receivables and accrued income, the Group has applied the simplified approach to measure the loss allowance at lifetime ECL and in determining, has taken into account the estimated based on historical credit loss experience based on the past due status of the debtors, adjusted as appropriate to reflect current conditions and estimates of future economic conditions.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

6. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (cont'd)

(b) *Liquidity risk management*

Liquidity risk is the risk that the Group will encounter difficulty in meeting financial obligations due to shortage of funds. The Group's exposure to liquidity risk arises primarily from mismatches of the maturities of financial assets and liabilities.

The Group monitors and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations and to mitigate the effects of fluctuations in cash flows.

Non-derivative financial liabilities

The following table details the remaining contractual maturity for non-derivative financial liabilities. The tables have been drawn up based on the contractual cash flows of financial liabilities based on the earliest date on which the Group can be required to pay.

Group	Weighted average effective interest rate	Within 1 year	Between 1 year and within 5 years	More than 5 years	Unearned Interest	Total
	%	S$'000	S$'000	S$'000	S$'000	S$'000
2023/24						
Trade and other payables	-	204,732	-	-	-	204,732
Lease liabilities	1.90	3,104	3,171	1,360	(352)	7,283
		207,836	3,171	1,360	(352)	212,015

Authority	Weighted average effective interest rate	Within 1 year	Between 1 year and within 5 years	More than 5 years	Unearned Interest	Total
	%	S$'000	S$'000	S$'000	S$'000	S$'000
2023/24						
Trade and other payables	-	204,705	-	-	-	204,705
Lease liabilities	1.90	3,104	3,171	1,360	(352)	7,283
		207,809	3,171	1,360	(352)	211,988
2022/23						
Trade and other payables	-	123,154	-	-	-	123,154
Lease liabilities	1.85	9,026	5,764	1,782	(546)	16,026
		132,180	5,764	1,782	(546)	139,180

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

6. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (cont'd)

(c) *Foreign currency risk management*

The Group and the Authority are not exposed to significant foreign currency risk as its transactions, financial assets and liabilities are mainly denominated in Singapore dollars.

At the reporting date, the carrying amounts of significant monetary items denominated in currencies other than the Group's functional currency are as follows:

	Liabilities		Assets	
	Group	Authority	Group	Authority
	2023/24 S$'000	2022/23 S$'000	2023/24 S$'000	2022/23 S$'000
European Euro	-	(10)	-	-
Australian Dollar	-	(472)	387	298
Canadian Dollar	-	(3)	1	1
	-	(485)	388	299

Foreign currency sensitivity

The following table details the sensitivity to a 5% (2022/23: 5%) increase and decrease in the relevant foreign currencies against the functional currency of the Group. 5% (2022/23: 5%) is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes outstanding foreign currency denominated monetary items. The analysis adjusts the translation at year end for a 5% (2022/23: 5%) change in spot foreign currency rates for monetary items.

If the relevant foreign currency were to strengthen by 5% (2022/23: 5%) against the functional currency of the Group, surplus (deficit) before contribution to Government Consolidated Fund will increase/ decrease by:

	Group	Authority
	2023/24 S$'000	2022/23 S$'000
European Euro	-	*
Australian Dollar	19	(9)
Canadian Dollar	*	*
	19	(9)

* Denotes less than S$1,000.

A 5% (2022/23: 5%) weakening of the above currency against the Singapore Dollar at the reporting dates would have equal but opposite effects on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

The Group does not engage in speculative foreign exchange transactions.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

7. FAIR VALUES OF ASSETS AND LIABILITIES

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability which market participants would take into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in the financial statements is determined on such a basis, except for leasing transactions that are within the scope of SB-FRS 116 *Leases*, and measurements that have some similarities to fair value but are not fair value, such as value in use in SB-FRS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

Fair value hierarchy

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Fair value measurements that use inputs of different hierarchy levels are categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

(a) *Assets and liabilities that are measured at fair value on a recurring basis*

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used).

Financial assets	Fair value as at		Fair value hierarchy	Valuation technique(s) and key input(s)
	2023/24 S$'000	2022/23 S$'000		
Quoted debt securities	79,987	72,401	Level 1	Quoted bid prices in an active market

(b) *Financial instruments whose carrying amount approximates fair value*

Management has determined that, other than financial assets held at FVTOCI, the carrying amounts of all other financial assets, which comprise trade and other receivables, cash and cash equivalent, and trade and other payables based on their notional amounts, reasonably approximate their fair values because these are mostly short term in nature or are repriced frequently.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

8. CAPITAL MANAGEMENT

The Group reviews its capital structure at least annually to ensure that the Group will be able to continue as a going concern.

The capital structure of the Group comprises capital and accumulated surplus. The Group's overall strategy remains unchanged from 2022/23.

9. RELATED PARTY TRANSACTIONS

Some of the Group's transactions and arrangements are with related parties. The related party balances are unsecured, interest-free and repayable on demand unless otherwise stated.

Key management personnel compensation

Key management personnel are those persons having the authority and responsibility for planning, directing and controlling the activities of the Group.

Key management personnel compensation is as follows:

	Group	Authority
	2023/24 S$'000	2022/23 S$'000
Salaries and other short-term employee benefits	3,190	2,757
Central Provident Fund contributions	78	78

Other related party transactions

During the financial year, other than those disclosed elsewhere in the financial statements, there were the following significant related party transactions between the Authority and related parties:

	Group	Authority
	2023/24 S$'000	2022/23 S$'000
Meteorological services from National Environment Agency	11,266	10,137

In the Authority's role as an agent to the Government, it manages and provides oversight of the funding provided by the Government for Changi East development projects and grants to industry. During the year, S$548,911,000 (2022/23: S$1,084,774,000) was received on behalf of the Government of which S$207,000 (2022/23: S$574,000) was held on behalf by the Authority as part of restricted bank balances (Note 21) as at the end of the reporting period.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

10. CAPITAL ACCOUNT

This represents the net value of assets and liabilities transferred from the former Department of Civil Aviation when the Authority was established, and any subsequent equity contribution from or return of assets to the Government.

Dividend

Under the Capital Management Framework for Statutory Boards, the Minister for Finance, the body incorporated by the Minister for Finance (Incorporation) Act 1959, as the ultimate shareholder of the Group, expects an annual return in the form of dividends in return for the Government's equity injections.

11. INVESTMENT REVALUATION RESERVE

The investment revaluation reserve comprises the investment in debt instruments classified as at FVTOCI, net of cumulative loss allowance recognised on these investments and cumulative gain/loss reclassified to profit or loss upon disposal or reclassification of these investments.

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Balance at beginning of year	5,065	5,065	3,189
Net fair value (gain) loss on investments in debt instruments classified as at FVTOCI	(1,861)	(1,861)	2,296
Cumulative gain on investments in debt instruments classified as at FVTOCI			
- Reclassified to profit or loss upon disposal	(390)	(390)	(420)
Balance at end of year	2,814	2,814	5,065

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YEAR ENDED 31 MARCH 2024

12. PROPERTY, PLANT AND EQUIPMENT

Group	Buildings	Plant and equipment	Vehicles	Office/other equipment, furniture and fixtures	Capital improvements	Total
	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000
Cost:						
At 1 April 2023	217,872	670,693	3,425	37,329	55,474	984,793
Additions	3	-	-	30	-	33
Transfers from capital work-in-progress (Note 14)	5,506	18,434	-	24,068	1,760	49,768
Reclassification	(6,525)	726	-	5,799	-	-
Disposals/write-off	-	(15,869)	-	(2,630)	(2,376)	(20,875)
At 31 March 2024	216,856	673,984	3,425	64,596	54,858	1,013,719
Accumulated depreciation:						
At 1 April 2023	114,885	398,500	1,375	34,178	47,014	595,952
Depreciation for the year	6,276	47,178	340	10,022	1,380	65,196
Reclassification	(2,014)	224	-	1,790	-	-
Disposals/write-off	-	(15,150)	-	(2,261)	(2,090)	(19,501)
At 31 March 2024	119,147	430,752	1,715	43,729	46,304	641,647
Carrying amount:						
At 31 March 2024	97,709	243,232	1,710	20,867	8,554	372,072

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

12. PROPERTY, PLANT AND EQUIPMENT (cont'd)

Authority	Buildings	Plant and equipment	Vehicles	Office/other equipment, furniture and fixtures	Capital improvements	Total
	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000
Cost:						
At 1 April 2022	188,086	619,659	3,425	37,629	56,058	904,857
Transfers from capital work-in-progress (Note 14)	29,982	51,109	-	1,321	10	82,422
Disposals/write-off	(196)	(75)	-	(1,621)	(594)	(2,486)
At 31 March 2023	217,872	670,693	3,425	37,329	55,474	984,793
Additions	3	-	-	30	-	33
Transfers from capital work-in-progress (Note 14)	5,506	18,434	-	24,068	1,760	49,768
Reclassification	(6,525)	726	-	5,799	-	-
Disposals/write-off	-	(15,869)	-	(2,630)	(2,376)	(20,875)
At 31 March 2024	216,856	673,984	3,425	64,596	54,858	1,013,719
Accumulated depreciation:						
At 1 April 2022	107,868	356,526	1,035	34,253	46,291	545,973
Depreciation for the year	7,213	42,049	340	1,546	1,308	52,456
Disposals/write-off	(196)	(75)	-	(1,621)	(585)	(2,477)
At 31 March 2023	114,885	398,500	1,375	34,178	47,014	595,952
Depreciation for the year	6,276	47,178	340	10,022	1,380	65,196
Reclassification	(2,014)	224	-	1,790	-	-
Disposals/write-off	-	(15,150)	-	(2,261)	(2,090)	(19,501)
At 31 March 2024	119,147	430,752	1,715	43,729	46,304	641,647
Carrying amount:						
At 31 March 2024	97,709	243,232	1,710	20,867	8,554	372,072
At 31 March 2023	102,987	272,193	2,050	3,151	8,460	388,841

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

13. RIGHT-OF-USE ASSETS (The Group as Lessee)

The Group leases several leasehold land, office spaces and plant and equipment. The lease terms of each category of leases are as follows:

Leasehold land	2 to 94 years
Office spaces	2 to 5 years
Plant and equipment	2 to 15 years
Vehicles	3 years

The Group also made upfront payments to secure the right-of-use of certain leasehold land.

Group	Leasehold land	Office spaces	Plant and equipment	Vehicles	Total
	S$'000	S$'000	S$'000	S$'000	S$'000
Cost:					
At 1 April 2023	6,620,778	36,084	9,238	850	6,666,950
Additions	-	368	-	-	368
Disposals	-	(45)	-	-	(45)
At 31 March 2024	6,620,778	36,407	9,238	850	6,667,273
Accumulated depreciation:					
At 1 April 2023	1,076,776	27,124	2,875	658	1,107,433
Depreciation for the year	68,580	7,214	1,321	192	77,307
Disposals	-	(45)	-	-	(45)
At 31 March 2024	1,145,356	34,293	4,196	850	1,184,695
Carrying amount:					
At 31 March 2024	5,475,422	2,114	5,042	-	5,482,578

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

13. RIGHT-OF-USE ASSETS (The Group as Lessee) (cont'd)

Authority	Leasehold land	Office spaces	Plant and equipment	Vehicles	Total
	S$'000	S$'000	S$'000	S$'000	S$'000
Cost:					
At 1 April 2022	6,620,778	36,072	9,238	850	6,666,938
Additions	-	305	-	-	305
Disposals	-	(293)	-	-	(293)
At 31 March 2023	6,620,778	36,084	9,238	850	6,666,950
Additions	-	368	-	-	368
Disposals	-	(45)	-	-	(45)
At 31 March 2024	6,620,778	36,407	9,238	850	6,667,273
Accumulated depreciation:					
At 1 April 2022	1,008,196	20,494	1,554	329	1,030,573
Depreciation for the year	68,580	6,923	1,321	329	77,153
Disposals	-	(293)	-	-	(293)
At 31 March 2023	1,076,776	27,124	2,875	658	1,107,433
Depreciation for the year	68,580	7,214	1,321	192	77,307
Disposals	-	(45)	-	-	(45)
At 31 March 2024	1,145,356	34,293	4,196	850	1,184,695
Carrying amount:					
At 31 March 2024	5,475,422	2,114	5,042	-	5,482,578
At 31 March 2023	5,544,002	8,960	6,363	192	5,559,517

14. CAPITAL WORK-IN-PROGRESS

		Group	Authority	
	Note	2023/24	2023/24	2022/23
		S$'000	S$'000	S$'000
At beginning of the year		102,983	102,983	133,233
Additions during the year		78,789	78,789	52,172
Transfer to property, plant and equipment	12	(49,768)	(49,768)	(82,422)
Disposals/write-off		(12,420)	(12,420)	-
At end of the year		119,584	119,584	102,983

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

15. INVESTMENT IN SUBSIDIARY

	Authority	
	2023/24 S$'000	2022/23 S$'000
Unquoted equity shares at cost	-	-

Details of the subsidiary is as follows:

Name	Principal activities	Place of business	Proportion of ownership interest and voting power held	
			2023/24 %	2022/23 %
International Centre for Aviation Innovation Ltd.[1]	Supporting services to air transport and other related activities	Singapore	#	-

\# During the financial year, International Centre for Aviation Innovation Ltd., a company limited by guarantee, was incorporated on 18 August 2023.

(1) Audited by Deloitte & Touche LLP, Singapore.

16. INVESTMENT IN JOINT VENTURE

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Cost of investment in joint venture	31,070	31,070	31,070
Share of post-acquisition results	11,230	11,230	9,793
Investment in joint venture	42,300	42,300	40,863

Details of the joint venture are as follows:

Name	Principal activities	Place of business	Group's interest	
			2023/24 %	2022/23 %
Airport Logistics Park of Singapore[1]	Developing, marketing, managing and provision of facilities to the free trade zone logistics park	Singapore	20	20

(1) Unincorporated entity.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

16. INVESTMENT IN JOINT VENTURE (cont'd)

Airport Logistics Park of Singapore is structured as a separate vehicle and the Group has a residual interest in its net assets. The Group jointly controls the venture with other partner under the contractual agreement and requires unanimous consent for all major decisions over the relevant activities. Accordingly, the Group has classified its interest in Airport Logistics Park of Singapore as a joint venture.

The summarised financial information in respect of Airport Logistics Park of Singapore, based on its FRS financial statements and reconciliation with the carrying amount of the investment in the financial statements are as follows:

	2023/24 S$'000	2022/23 S$'000
Revenue	6,871	6,739
Interest income	4,166	1,869
Depreciation expense	(1,625)	(1,624)
Other expenses	(2,226)	(2,090)
Profit before tax	7,186	4,894
Income tax expense	-	-
Profit after tax	7,186	4,894
Other comprehensive income	-	-
Total comprehensive income	7,186	4,894
Cash and cash equivalents	123,018	116,234
Trade and other receivables	2,094	1,593
Total current assets	125,112	117,827
Non-current assets	112,216	113,841
Total assets	237,328	231,668
Current liabilities	(3,195)	(3,149)
Non-current liabilities	(22,633)	(24,205)
Total liabilities	(25,828)	(27,354)
Net assets	211,500	204,314
Net assets	211,500	204,314
Proportion of the Group's ownership	20%	20%
Group's share of net assets	42,300	40,863
Carrying amount of interest in joint venture	42,300	40,863

There are no other financial liabilities included in the current and non-current liabilities except for trade and other payables and provisions.

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YEAR ENDED 31 MARCH 2024

17. INVESTMENT IN ASSOCIATE

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Cost of investment in associate	9,446	9,446	9,446
Share of post-acquisition results, net dividend received	3,590	3,590	1,219
Investment in associate	13,036	13,036	10,665

Details of the associate are as follows:

Name	Principal activities	Place of incorporation and business	Effective interest held by the Group	
			2023/24 %	2022/23 %
Experia Events Pte Ltd	Organising and management of conferences, exhibition and other related activities	Singapore	17	17

Although the Group has 17% equity interest in Experia Events Pte Ltd, the Group determined that it has significant influence because it has representation on the board of Experia Events Pte Ltd.

The summarised financial information in respect of Experia Events Pte Ltd, based on its FRS financial statements and reconciliation with the carrying amount of the investment in the financial statements are as follows:

	2023/24 S$'000	2022/23 S$'000
Revenue	55,807	9,987
Profit (Loss) after tax	13,947	(10,736)
Other comprehensive income	-	-
Total comprehensive income (loss)	13,947	(10,736)
Current assets	65,562	43,928
Non-current assets	37,734	40,144
Current liabilities	(21,208)	(16,296)
Non-current liabilities	(5,407)	(5,042)
Net assets	76,681	62,734
Net assets	76,681	62,734
Proportion of the Group's ownership	17%	17%
Group's share of net assets	13,036	10,665
Carrying amount of interest in associate	13,036	10,665

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

18. LONG-TERM INVESTMENT

The long-term investment relates to the Group's corporate membership at the National Service Resort and Country Club.

19. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Investment in debt instruments classified as at FVTOCI:			
- Quoted debt securities	79,987	79,987	72,401
Comprising:			
- Current	25,519	25,519	13,717
- Non-current	54,468	54,468	58,684
	79,987	79,987	72,401

The bonds are held by the Group within a business model whose objective is both to collect their contractual cash flows which are solely payments of principal and interest on the principal amount outstanding and to sell these financial assets. Hence, the bonds are classified as at FVTOCI.

For purpose of impairment assessment, the bonds are considered to have low credit risk as they are held with counterparties with minimum credit rating of "BBB-" by Standard & Poor's or "Baa3" by Moody's. The Group holds no collateral over this balance. Accordingly, for the purpose of impairment assessment for these debt instruments, the loss allowance is measured at an amount equal to 12-month expected credit losses ("ECL").

In determining the ECL, management has taken into account the historical default experience, the financial position of the counterparties, as well as the future prospects of the industries in which the issuers of these debt instruments obtained from economic expert reports, financial analyst reports and considering various external sources of actual and forecast economic information, as appropriate, in estimating the probability of default of each of these financial assets occurring within their respective loss assessment time horizon, as well as the loss upon default in each case.

The valuation methodology for these investments is disclosed in Note 7(a).

NOTES TO THE FINANCIAL STATEMENTS

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20. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Other receivables and prepayments (non-current)			
Prepaid lease	4,689	4,689	5,099
Prepayments	14,409	14,409	18,776
Other receivables	131	131	230
	19,229	19,229	24,105
Trade and other receivables and prepayments (current)			
Trade receivables:			
- Related parties	276	276	557
- Others	87,034	87,034	81,817
Accrued income	36,550	36,550	26,667
Prepaid lease	410	410	410
Prepayments	37,958	37,936	24,229
Grants receivable	78,403	66,914	43,036
Sundry receivables (as agent to the Government)	59,815	59,815	125,824
Other receivables:			
- Subsidiary	-	11,489	-
- Others	11,629	11,589	2,441
	312,075	312,013	304,981

(a) *Trade receivables*

As at 1 April 2022, trade receivables from contracts with customers amounted to $89,279,000.

In 2023/24, the average credit period for trade receivables ranges from 14 to 183 days as the Group has extended the credit terms for certain transactions in view of the deferral of payment of Airport fees (2022/23: 14 to 365 days). No interest is charged on the trade receivables for payment received before due date of the invoice. Thereafter, the Group reserves the right to charge interest at 7.7% or 8.1% (2022/23: 5.5% or 8.0%) per annum on the overdue balance.

The Group's exposure to credit risk arises through its trade receivables. Due to the nature of the Group's operation, the Group has a concentration of credit risk of about 99% (2022/23: 96%) (Note 6 (a)) that were due from one of the Group's major customers and related party as at the end of the financial year.

A trade receivable is written off when there is information indicating that there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or when the trade receivables are over one year past due, whichever occurs earlier.

Loss allowance for trade receivables has been measured at an amount equal to lifetime expected credit losses ("ECL") based on individual assessment of debtors. The ECL on trade receivables are estimated based on past default experience of the debtors and an analysis of the debtors' current financial position, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

20. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS (cont'd)

(a) *Trade receivables (cont'd)*

There has been no change in the estimation techniques or significant assumptions made during the current reporting period.

The movements in credit loss allowance are as follows:

	2023/24 S$'000	2022/23 S$'000
	Individually assessed	
Balance at beginning of year	-	-
Loss allowance recognised in income or expenditure during the year on:		
- New trade receivables originated	47	-
	47	-
Balance at end of year	47	-

Based on historical default rate, the Group believes that, apart from the above, no impairment allowance is necessary in respect of other trade receivables outstanding at the date of the statement of financial position.

(b) *Prepaid lease*

Prepaid lease represents premium paid in advance to Singapore Land Authority for leasehold land. The land is leased to the Group's associate, Experia Events Pte Ltd, under a back-to-back lease arrangement and the amount received was recognised as deferred income (Note 26).

	S$'000
Cost:	
At 1 April 2022, 31 March 2023 and 31 March 2024	12,290
Accumulated amortisation:	
At 1 April 2022	6,372
Amortisation charge for the year	410
At 31 March 2023	6,782
Amortisation charge for the year	409
At 31 March 2024	7,191
Carrying amount:	
At 31 March 2024	5,099
At 31 March 2023	5,508

As the net investment in this lease arrangement is S$nil, no finance lease receivable and lease liability are recognised upon the application of SB-FRS 116.

NOTES TO THE FINANCIAL STATEMENTS

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20. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS (cont'd)

(c) *Accrued income*

As at 1 April 2022, accrued income from contracts with customers amounted to $29,651,000.

This pertains to services provided to customers for which invoices are not billed. Accordingly, none of the amounts due from debtors at the end of the reporting period is past due.

The increase in the accrued income from contracts with customers is mainly due to the increase in passenger traffic and aviation levy rate during the year.

In the opinion of the management, the carrying amount of accrued income approximates their fair value at the date of the statement of financial position.

Accrued income is written off when there is information indicating that there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings.

Loss allowance for accrued income has been measured at an amount equal to lifetime expected credit losses ("ECL"). The ECL on accrued income are estimated based on the past default experience of the debtors and an analysis of the debtors' current financial position, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate.

There has been no change in the estimation techniques or significant assumptions made during the current reporting period.

The movements in credit loss allowance are as follows:

	2023/24 S$'000	2022/23 S$'000
	Individually assessed	
Balance at beginning of year	991	-
Loss allowance recognised in income or expenditure during the year on:		
- New accrued income originated	-	991
- Reversal of due to settlement of receivables	(991)	-
	(991)	991
Balance at end of year	-	991

Based on historical default rate, the Group believes that, apart from the above, no impairment allowance is necessary in respect of other accrued income at the date of the statement of financial position.

(d) *Grants receivable*

This pertains to accrued grants receivable from the Government that are not billed. Accordingly, none of the amounts due from the Government at the end of the reporting period is past due.

NOTES TO THE FINANCIAL STATEMENTS

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20. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS (cont'd)

(d) *Grants receivable (cont'd)*

Grants receivable are considered to have low credit risk as they are not due for collection at the end of the reporting period and there has been no significant increase in the risk of default on the receivables since initial recognition. The Group believes that no loss allowance is required. There has been no change in the estimation techniques or significant assumptions made during the current reporting period.

21. CASH AND CASH EQUIVALENTS

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Bank and cash balances	828,287	828,287	627,489
Add: Restricted bank balances [(1)]	207	207	574
	828,494	828,494	628,063

(1) At the end of reporting period, included in the restricted bank balances are funds held on behalf for the Ministry of Transport.

The carrying amounts of cash and cash equivalents approximate their fair values.

The bank and cash balances include amounts placed with Accountant-General's Department under the Government's Centralised Liquidity Management ("CLM") scheme. These amounts are centrally maintained at consolidated pool and are available upon request.

22. TRADE AND OTHER PAYABLES

	Note	Group	Authority	
		2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Trade payables:				
- Related parties		3,888	3,888	3,697
- Others		28,829	28,829	4,157
Income billed in advance		80,768	80,768	79,019
Accrued expenses		81,150	81,123	70,289
Accrued payroll expenses		24,833	24,833	24,013
Sundry and other payables		4,236	4,236	224
Sundry payables (as agent to the Government)		61,408	61,408	20,489
Deposits received		388	388	285
Current portion of:				
- Grants received in advance	24	47,447	47,447	65,430
- Deferred income	26	410	410	410
- Deferred capital grants	27	46,914	46,914	45,692
- Provision for pension and post-retirement medical benefits plan	28	621	621	510
		380,892	380,865	314,215

NOTES TO THE FINANCIAL STATEMENTS

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22. TRADE AND OTHER PAYABLES (cont'd)

The average credit period on purchases of goods and services is 1 month (2022/23: 1 month).

(a) Income billed in advance

Contract liabilities related to the Group's obligation to provide rental services, airport license, aerodrome certification for which the Group has received or yet to receive the consideration from customer. Contract liabilities are recognised as revenue when control of a product or service has transferred to a customer.

There were no significant changes in the contract liability balances during the reporting period.

The following table shows how much of the revenue recognised in the current reporting period that relates to brought forward contract liabilities. There was no revenue recognised in the current reporting period that related to performance obligations that were satisfied in a prior year.

Group's revenue recognised that was included in the contract liabilities balance at the beginning of the period is as follows:

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Contract liabilities in prior reporting period recognised as income in current reporting period	79,019	79,019	82,106

23. LEASE LIABILITIES

	Group	Authority	
	2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
Maturity analysis:			
Year 1	3,104	3,104	9,026
Year 2	1,065	1,065	3,027
Year 3	891	891	1,056
Year 4	793	793	888
Year 5	422	422	793
Year 6 and onwards	1,360	1,360	1,782
	7,635	7,635	16,572
Less: Unearned interest	(352)	(352)	(546)
	7,283	7,283	16,026
Comprising:			
- Current	3,012	3,012	8,829
- Non-current	4,271	4,271	7,197
	7,283	7,283	16,026

The Group does not face significant liquidity risk with regards to its lease liabilities.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

24. GRANTS RECEIVED IN ADVANCE

	Note	Group	Authority	
		2023/24 S$'000	2023/24 S$'000	2022/23 S$'000
At beginning of the year		146,288	146,288	58,427
Operating grants received during the year	33	26,223	26,263	131,347
Movement in grant accruals	33	35,367	23,878	23,957
		61,590	50,141	155,304
Transfer to income or expenditure:				
- Grants for property tax		(20,425)	(20,425)	(19,700)
- Grants for industry		(758)	(758)	(15,161)
- Grants for research and development		(35,327)	(23,878)	(30,864)
- Others		(4,445)	(4,445)	(1,718)
		(60,955)	(49,506)	(67,443)
At end of the year		146,923	146,923	146,288
Comprising:				
- Current	21	47,447	47,447	65,430
- Non-current		99,476	99,476	80,858
		146,923	146,923	146,288

The Group received government operating grants for certain operating activities. These grants received in advance will be recorded in the income and expenditure statement when the expenses are incurred.

25. CONTRIBUTION PAYABLE TO GOVERNMENT CONSOLIDATED FUND

The contribution to the Government Consolidated Fund is payable in accordance with Section 3(a) of the Statutory Corporations (Contributions to Consolidated Fund) Act 1989. The contribution is based on a percentage of the net surplus as specified by the Minister for Finance. The contribution rate is pegged to the prevailing corporate tax rate and the applicable rate for 2023/24 is 17% (2022/23: 17%).

The Group's contribution to consolidated fund for FY2023/24 is S$6.67 million due to a net surplus position after the utilisation of approximately S$55 million brought forward unrecognised unutilised deficits in prior year.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

26. DEFERRED INCOME

	Note	Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
At beginning of the year		5,508	5,508	5,918
Amortisation for the year		(409)	(409)	(410)
At end of the year		5,099	5,099	5,508
Comprising:				
- Current	22	410	410	410
- Non-current		4,689	4,689	5,098
		5,099	5,099	5,508

Deferred income represents amount received from the land leased to the Group's associate, Experia Events Pte Ltd. The land lease amount is amortised over 30 years effective September 2006.

27. DEFERRED CAPITAL GRANTS

	Note	Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
At beginning of the year		4,151,431	4,151,431	4,193,711
Capital grants received during the year	33	19,490	19,490	3,412
		19,490	19,490	3,412
Amortisation for the year		(58,283)	(58,283)	(45,692)
At end of the year		4,112,638	4,112,638	4,151,431
Comprising:				
- Current	22	46,914	46,914	45,692
- Non-current		4,065,724	4,065,724	4,105,739
		4,112,638	4,112,638	4,151,431

The Group received government capital grants mainly for the alienation of land and related construction cost. There is no unfulfilled condition or contingency attached to the grants.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

28. PROVISION FOR PENSION AND POST-RETIREMENT MEDICAL BENEFITS PLAN

The Group provides pension and post-retirement medical benefit schemes to certain of its retired employees who did not opt for transfer to the Central Provident Fund Scheme. The pension and post-retirement medical benefits schemes are closed to new entrants.

(a) *Pension Scheme*

An eligible employee, upon reaching his retirement date and who has completed at least 10 years of service, is entitled to opt for one of the three retirement benefit options:

Option (i) : Fully commuted pension gratuity
Option (ii) : Full annual pension
Option (iii) : Partial commutation of pension with gratuity

(b) *Post-Retirement Medical Benefits Scheme*

An eligible employee, upon reaching his retirement date and who has completed at least 10 years of service, is entitled to the following post-retirement medical benefits:

Option (i) : Hospitalisation benefits
Option (ii) : Outpatient benefits
Option (iii) : Dental benefits

The actuarial valuation of the present value of the defined benefit obligation was carried out in 2022/23 by a qualified independent actuary in accordance with SB-FRS 19 *Employee Benefits*. In assessing the plan's liabilities, the Projected Unit Credit actuarial methodology has been applied. For the purpose of ascertaining the obligation as of 31 March 2024, management has conducted a review of the bases and underlying assumptions used in the calculation.

The principal financial assumptions used for the purpose of the actuarial valuations were as follows:

	Valuation at Group 2023/24 %	Valuation at Authority 2023/24 %	Valuation at Authority 2022/23 %
Pension Scheme			
Discount rate	2.9	2.9	2.9
Average age	80.8 years	80.8 years	80.8 years
Post-Retirement Medical Benefit Scheme			
Discount rate	2.9	2.9	2.9
Medical inflation rate	4.8	4.8	4.8
Average age	80.8 years	80.8 years	80.8 years

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

28. PROVISION FOR PENSION AND POST-RETIREMENT MEDICAL BENEFITS PLAN (cont'd)

The amount recognised in the statement of financial position in respect of the Group's defined benefit obligation is as follows:

	Note	Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
Current	22	621	621	510
Non-current		8,434	8,434	8,925
		9,055	9,055	9,435

Amounts recognised in income or expenditure in respect of the defined benefit plan are as follows:

	Note	Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
Interest cost	30	267	267	107

The charge for the year is included in salaries, wages and staff benefits expense in the statement of comprehensive income.

Changes in the present value of the defined benefit obligation are as follows:

	Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
Opening defined benefit obligation	9,435	9,435	8,687
Interest cost	267	267	107
Actuarial loss recognised in other comprehensive income	-	-	1,111
Benefits paid	(647)	(647)	(470)
Closing defined benefit obligation	9,055	9,055	9,435

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

28. PROVISION FOR PENSION AND POST-RETIREMENT MEDICAL BENEFITS PLAN (cont'd)

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the defined benefit obligation as of the end of the reporting period, assuming if all other assumptions were held constant:

	%	Increase (decrease) in Defined Benefit Obligation — Group 2023/24 S$'000	Authority 2023/24 S$'000	Authority 2022/23 S$'000
Pension Scheme				
Discount rate	+ 0.5	(137)	(137)	(151)
	- 0.5	145	145	161
Post-Retirement Medical Benefit Scheme				
Discount rate	+ 0.5	(257)	(257)	(273)
	- 0.5	278	278	297
Medical inflation rate	+ 0.5	298	298	290
	- 0.5	(277)	(277)	(270)

29. REVENUE

	Group 2023/24 S$'000	Authority 2022/23 S$'000
Timing of revenue recognition		
SB-FRS 115 *Revenue*		
At a point in time:		
Aviation training programme fee	7,560	7,108
Certification, examination and licence fee	16,462	15,625
Over time:		
Fees for airport and related services	319,990	249,870
Airport and aerodrome licence fee	7,350	6,350
Other service income	6,175	5,660
Non SB-FRS 115 *Revenue*		
SB-FRS 116 *Leases*:		
Annual ground rent	75,786	75,694
Other rental income	971	823
SB-FRS 1001 *Non-exchange revenue*:		
Aviation levy	170,854	89,795
	605,148	450,925

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

30. SALARIES, WAGES AND STAFF BENEFITS

The following are included in salaries, wages and staff benefits:

	Note	Group 2023/24 S$'000	Authority 2022/23 S$'000
Pension and post-retirement medical benefits cost	28	267	107
Employer's contribution to Central Provident Fund		19,741	20,262

31. NON-OPERATING INCOME, NET

	Group 2023/24 S$'000	Authority 2022/23 S$'000
Non-operating income		
Gain on foreign exchange	-	1,724
Interest income	29,685	9,843
Others	222	28
	29,907	11,595
Non-operating expense		
Loss on foreign exchange	(1,845)	-
Foreign exchange loss on financial assets measured at FVTOCI	(331)	(312)
Loss on disposal of property, plant and equipment	(13,687)	(9)
Loss on disposal of financial assets measured at FVTOCI	(390)	(421)
Others	(120)	-
	(16,373)	(742)
Non-operating income, net	13,534	10,853

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

32. COMMITMENTS

(a) *Capital commitments*

Capital expenditure contracted for as at the end of the reporting period but not recognised in the financial statements are as follows:

	Group 2023/24 S$'000	Authority 2022/23 S$'000
Capital commitments in respect of property, plant and equipment	145,852	113,850

(b) *Operating lease commitments - as lessor*

Maturity analysis of operating lease receivables:

	Group 2023/24 S$'000	Authority 2022/23 S$'000
Year 1	76,067	76,369
Year 2	75,664	76,040
Year 3	75,652	75,658
Year 4	75,648	75,648
Year 5	75,648	75,648
Year 6 and onwards	1,037,367	1,113,015
	1,416,046	1,492,378

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

33. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's statement of cash flows as cash flows from financing activities.

Group	1 April 2023	Financing cash flows (i)	Non-cash changes				Other changes (ii)	31 March 2024
			Grants utilised	Grants accruals	Grants Amortised	New lease liabilities		
	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000
Lease liabilities (Note 23)	16,026	(9,021)	-	-	-	368	(90)	7,283
Grants received in advance (Note 24)	146,288	26,223	(60,955)	35,367	-	-	-	146,923
Deferred capital grants (Note 27)	4,151,431	19,490	-	-	(58,283)	-	-	4,112,638
Cash at bank								
- Restricted balance (Note 21)	(574)	367	-	-	-	-	-	(207)
	4,313,171	37,059	(60,955)	35,367	(58,283)	368	(90)	4,266,637

(i) The cash flows made up of repayment of lease liabilities and operating/capital grants received in the statement of cash flows.

(ii) Other changes include lease modification adjustments.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

33. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES (cont'd)

Authority	1 April 2022	Financing cash flows (i)	Non-cash changes				Other changes (ii)	31 March 2023
			Grants utilised	Grants accruals	Grants Amortised	New lease liabilities		
	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000	S$'000
Lease liabilities (Note 23)	23,028	(7,210)	-	-	-	305	(97)	16,026
Grants received in advance (Note 24)	58,427	131,347	(67,443)	23,957	-	-	-	146,288
Deferred capital grants (Note 27)	4,193,711	3,412	-	-	(45,692)	-	-	4,151,431
Cash at bank								
- Restricted balance (Note 21)	(9,877)	9,303	-	-	-	-	-	(574)
	4,265,289	136,852	(67,443)	23,957	(45,692)	305	(97)	4,313,171

(i) The cash flows made up of repayment of lease liabilities and operating/capital grants received in the statement of cash flows.

(ii) Other changes include lease modification adjustments.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

34. CHANGI AIRPORT DEVELOPMENT FUND

(a) The Changi Airport Development Fund (the "Fund") was established in accordance with Section 25A and Section 25B of the Civil Aviation Authority of Singapore Act 2009 which came into effect on 1 September 2015. The moneys in the Fund may be withdrawn by the Authority only for the specific purpose of expanding Changi Airport. The Authority was given the authority to administer the Fund under Sections 25A and 25B of the Civil Aviation Authority of Singapore Act 2009. Upon dissolution of the Fund, the remaining balance would be transferred back to the Consolidated Fund and the past reserves of the Government.

(b) The results of the Fund for the year are as follows:

	Group 2023/24 S$'000	Authority 2022/23 S$'000
Income		
Funds from Government	2,000,000	-
Airport development levy	262,230	166,791
Interest income	135,503	88,030
Others	1	-
	2,397,734	254,821
Expenditure		
Grants disbursed to a third party	-	310,513
	-	310,513
Net surplus (deficit) for the year	2,397,734	(55,692)
Accumulated surplus as at 1 April	4,531,963	4,587,655
Accumulated surplus as at 31 March	6,929,697	4,531,963

(c) The assets and liabilities of the Fund as at 31 March are as follows:

	Group 2023/24 S$'000	Authority 2022/23 S$'000
Accumulated fund	6,929,697	4,531,963
Non-current assets		
Investment in Special Singapore Government Securities	6,461,285	3,908,328
Current assets		
Cash placed with Accountant-General's Department under CLM scheme	357,968	546,608
Airport development levy receivable	48,531	47,976
Interest receivable	61,913	52,143
	6,929,697	646,727
Current liabilities		
Disbursement payables	-	(23,092)
Net assets	6,929,697	4,531,963

The assets and liabilities of the Fund are excluded from the assets and liabilities of the Authority.

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 31 MARCH 2024

35. GRANTS TO AVIATION INDUSTRY

To support the aviation industry during the COVID-19 pandemic, the Government provided grants to the aviation industry to reduce the impact of COVID-19 on their operations. The Group supports the Government in implementing these measures by acting as an agent to the Government and administered these grants on behalf of the government. During the year, S$76,711,000 (2022/23: S$684,182,000) was disbursed as part of these initiatives.

36. AUTHORISATION OF FINANCIAL STATEMENTS

The financial statements for the year ended 31 March 2024 were authorised for issue by the Authority members on 27 June 2024.

Civil Aviation Authority of Singapore

Singapore Changi Airport
P.O. Box 1 Singapore 918141