

ARCHITECTING SINGAPORE'S DIGITAL FUTURE

Infocomm Media Development Authority
Annual Report 2021/2022



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About IMDA

The Infocomm Media Development Authority (IMDA) leads Singapore's digital transformation by developing a vibrant digital economy and an inclusive digital society.

As Architects of Singapore's Digital Future, we foster growth in Infocomm Technology and Media sectors in concert with progressive regulations, harnessing frontier technologies, and developing local talent and digital infrastructure ecosystems to establish Singapore as a digital metropolis.

Vision

To build a dynamic digital economy and a cohesive digital society that is driven by an exceptional infocomm and media ecosystem.

Mission

Drive Singapore's digital transformation with Infocomm Media.

Values

- Courage
- Integrity
- Collaboration
- Innovation
- Care & Respect

Foreword

IMDA's annual report is a snapshot of our achievements and highlights in the past year, and captures how we have worked to unify Singapore's digitalisation efforts. Whether it is providing help for companies in different industries to jumpstart their digitalisation journeys, or creating new ecosystems, opportunities, and capabilities for our digital future, IMDA is moving ahead with industries and people, for Singapore's digital economy to be a leading global node in Asia.



Chairman's Message



Mr Chan Yeng Kit

Chairman, IMDA;
Permanent Secretary (Health),
Ministry of Health

Singapore's consistent work to uplift our Digital Economy gave us a strong foundation to see ourselves through the COVID-19 pandemic and swiftly transition into the "new normal".

Yet, much more needs to be done. We need to lock in these gains we achieved through digitalisation, future-proof our economy, raise our resilience for future crises and stay relevant in an increasingly digital world that continues to progress and evolve at breakneck speed.

As Architects of the Digital Economy, IMDA will continue to invest on multiple fronts – aiding our SMEs to digitally transform, building and strengthening our digital infrastructure, training and upskilling our tech workforce, rolling out progressive regulations and nurturing a digital society.

Preparing local businesses for the future

More businesses have gone digital to expand their market share and diversify their revenue sources. What was a means to stay afloat then, is now a core and sustainable part of business. We will continue to help businesses leverage opportunities brought along by digitalisation, through programmes that will aid them in integrating tech even further, while strengthening the strong digital foundation for businesses.

To that end, one of IMDA's vehicles is the Chief Technology Officer-as-a-Service (CTOaaS). CTOaaS gives businesses the confidence and convenience to go digital, easily self-assess their digital readiness

and needs anytime, anywhere, and access market-proven digital solutions quickly and cost-effectively.

EMPOWERING ENTERPRISES

Updates on digitalisation programmes and digital utilities



CTO-as-a-Service

A one-stop platform for SMEs to access digitalisation resources

>4,000
businesses visited

>200
businesses requested for digital consultancy services



InvoiceNow

A platform for direct digital transmissions of invoices across finance systems

>50,000
businesses connected to the network



SGTraDex

A data exchange platform that streamlines information flow across fragmented supply chains

3 trial cases with the potential to unlock more than **\$200 million** in value annually

Chairman's Message

Such solutions need common standards and a means to be interoperable. Hence, IMDA has been establishing and driving the adoption of digital utilities, which have common standards and functionalities to enable business transaction and data flows. Our digital utilities for invoicing and exchange of data and trade documents provide companies a trusted and efficient means of doing business digitally.

Businesses also need to grow beyond Singapore's borders. Collaboration and strategic partnerships have been a linchpin for good business since the dawn of enterprise. And it continues to be so in this digital age where competencies and resources are widely distributed across industries, geographies and players.

In this light, IMDA supports local enterprises by forging Digital Economy Agreements (DEAs) with strategic international partners. DEAs enable cross-border digital trade and interoperability of digital systems, increase business efficiency and lower operational costs for those companies venturing into the global marketplace.

KEEPING IT SAFE

Building a safe and trusted digital ecosystem

PDPA Amendments

- **89%**
Businesses say the PDPA prepared them for the Digital Economy
- **84%**
Consumers say the PDPA assures them that their personal data is safeguarded



Alternative Dispute Resolution Scheme

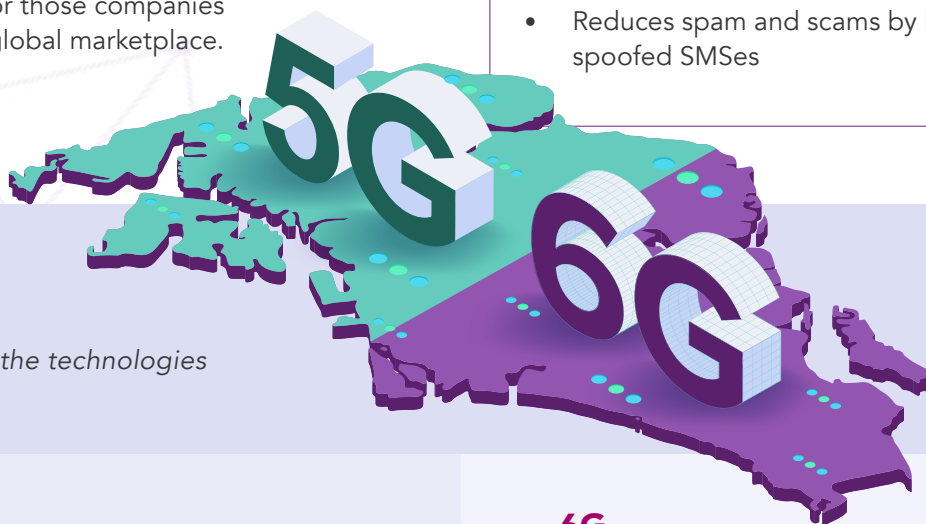
- A two-stage method to help consumers and businesses resolve disputes quickly
- Takes no more than 2.5 months

SMS Registry

- Reduces spam and scams by blocking spoofed SMSes

LEAPING AHEAD

Paving the way for the technologies of tomorrow



5G

5,000 trained 5G professionals expected by 2023

\$30 million invested to accelerate the adoption and commercialisation of 5G solutions

6G

Future Comms, including 6G are,

- Enhancing Singapore's communications
- Boosting connectivity capabilities
- Seizing future opportunities

Next-Gen Broadband

Plans to increase next-gen broadband speeds by up to

10x



TrustTech

\$50 million

to bolster digital trust capabilities

Chairman's Message

With several DEAs already in place, Singapore presses on to build an extensive network of free trade agreements and other digital cooperation initiatives. In FY21, IMDA concluded negotiations for two other DEAs – the United Kingdom-Singapore Digital Economy Agreement and Korea-Singapore Digital Partnership Agreement.

Creating an innovative and trusted digital economy

The digital age brings along significant opportunities, such as the rollout of Pick!s convenient parcel lockers with a common digital platform, so all citizens are within reach of these lockers to pick up parcels at their convenience. I am happy to say that Pick!s lockers have now been rolled out nationwide, for all to use.

We will continue to invest in future-proof and resilient infrastructure for the next bound. Specifically, we will invest in our next-generation broadband, 5G and 6G networks and beyond. In addition, we will continue to invest in our R&D capabilities to grow technologies useful for the Digital Economy. Such investments have already enabled us to be consistently ranked first for the past four years in Technological Infrastructure for the World Competitiveness Ranking by the Institute for Management Development (IMD). It has

also allowed us to remain in the top three for this IMD World Competitiveness Ranking, just behind Denmark and Switzerland.

At the same time, we will continue to ensure such conveniences are protected by a safe and trusted online environment. During the year, IMDA oversaw the implementation of various progressive initiatives, guidelines and regulations to safeguard businesses and people in Singapore.

Building a future-ready workforce

Our vibrant and progressive digital economy ecosystem has spurred higher demand for tech skills and jobs for Singaporeans to take on the bright digital future. Ensuring that our local workforce has the right tech skills and capabilities will support Singapore businesses in leveraging digitalisation and emerging technologies to create new value for consumers and customers.

IMDA will continue to uplift the capabilities of our workforce as more firms utilise tech in their business and processes. We will spare no effort in ensuring industries and companies can nurture a strong pipeline of local tech talent.

THE FUTURE OF WORK

Our achievements raising a future-ready workforce in FY21



Chairman's Message

Nurturing a digital society

Inclusion is also at the heart of everything we do, and we work tirelessly towards leaving no one behind as Singapore embraces the digital wave.

The Digital for Life movement sees us working with Private-Public-People (3P) partners to bring Singaporeans from all ages and walks of life together, embracing digital learning as a lifelong pursuit. It also galvanises those digitally-abled to help those digitally less-abled in their journey.

Additionally, we worked to make digitalisation more accessible for lower-income households and students, by providing them with Internet connections and computers through initiatives such as NEU PC Plus.

Our Code@SG programme continues to help primary and secondary school students fuel their knowledge and skills in areas such as computational thinking, coding and digital making.

Finally, the Seniors Go Digital Programme continues to build up seniors' digital capabilities, so they can lead more digitally engaged lives, in a safe manner.

NO ONE LEFT BEHIND

Our achievements in building an inclusive digitally empowered society



Subsidised fibre broadband connectivity for low-income households

>34,000

low-income households assisted since 2020 through the Home Access and NEU PC Plus Programmes

The digital future is bright

As Architects of Singapore's Digital Future, IMDA will continue to propel the growth of Singapore's Digital Economy. We will work to deepen digitalisation amongst enterprises, invest in digital infrastructure, groom talents, keep Singaporeans safe with progressive regulations, and build an inclusive Digital Society for Singapore's businesses and people to seize the possibilities of the Digital Economy.

We will do this in partnership with everyone – Singaporeans, industry, government stakeholders and international partners – and welcome everyone to join us on this journey, together.

Helping every Singaporean embrace digital

Hawkers Go Digital

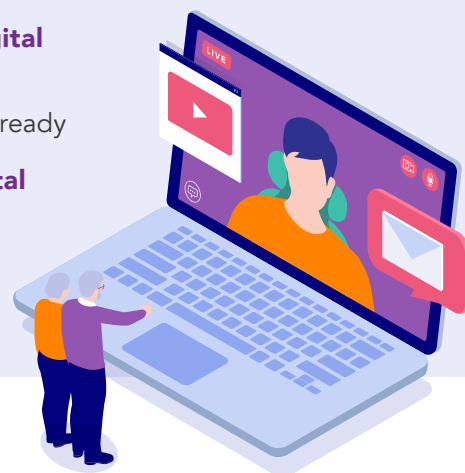
11k

hawkers digitally ready

Seniors Go Digital

150k

seniors learned digital skills



Board of Directors & Senior Management



Board of Directors



Mr Chan Yeng Kit
Chairman,
Permanent Secretary
(Health),
Ministry of Health



Mr Amit Malhotra
Director,
Bodhi Tree Systems VCC



Mr Andrew Kwan
Group Managing Director,
Commonwealth Capital
Group



Dr Ayesha Khanna
Chief Executive Officer
and Co-Founder,
ADDO AI



Mr Henry Low
Director and
Country Manager,
Amazon Singapore



Mr Jeffrey Siow
Managing Director and
Chief Operating Officer,
Enterprise Singapore



Mr Kevin Wo
Microsoft Operations
Pte Ltd



Mr Kok Ping Soon
Chief Executive Officer,
Government Technology
Agency



Mr Lew Chuen Hong
Chief Executive Officer,
Infocomm Media
Development Authority



Dr Lim Kuo-Yi
Co-Founder and
Managing Partner,
Monk's Hill Ventures Pte Ltd



Mr Quek Siu Rui
Co-Founder and
Chief Executive Officer,
Carousell Pte Ltd



Mr Ricky Ow
Partner,
Quest Ventures



Mr Robert Yap
Chairman,
Advisory Board
Independent Director,
Management Board,
Sunseap Group Pte Ltd



Mr Russell Tham
Joint Head, Enterprise
Development Group
and Joint Head,
Strategic Development,
Temasek Holdings Pte Ltd



Mr Saw Ken Wye
Chief Executive Officer,
CrimsonLogic Pte Ltd



Mr Vivek Couto
Co-Founder and
Executive Director,
Media Partners Asia
Limited



Ms Wu Choy Peng
Director, Government
Transformation, ASEAN,
Amazon Web Services
Singapore

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Senior Management

Mr Lew Chuen Hong

Chief Executive, IMDA;
Commissioner,
Personal Data Protection Commission;
Executive Director, POFMA Office

Ms Aileen Chia

Deputy Chief Executive,
Connectivity Development
and Regulation;
Director-General (Telecoms and Post);
Deputy Executive Director,
POFMA Office

Mr Kiren Kumar

Deputy Chief Executive,
Development

Ms Alamelu Subramaniam

Assistant Chief Executive,
Media Policy and Content

Ms Foo Chi Hsia

Assistant Chief Executive,
International

Ms Gwenda Fong

Assistant Chief Executive,
Strategic Planning and Digital Readiness;
Chief Risk Officer

Mr Justin Ang

Assistant Chief Executive,
Media, Innovation, Communications
and Marketing

Mr Leong Der Yao

Assistant Chief Executive,
Sectoral Transformation

Dr Ong Chen Hui

Assistant Chief Executive,
BizTech

Mr Yeong Zee Kin

Assistant Chief Executive,
Data Innovation and Protection;
Deputy Commissioner, Personal Data
Protection Commission

Mr Leong Keng Thai

Senior Advisor,
Infocomm Media Development Authority

State of Singapore's Digital Economy



State of Singapore's Digital Economy

The Digital Future is now

Over two years into the pandemic, COVID-19 has accelerated digital transformation around the world. The way we live, work and play has been transformed through digital technologies, and this rapid digitalisation will continue as businesses, borders and consumers adjust to the new normal.

Singapore has kept pace through strong adoption of digital technologies. Now, more than ever, we need to lock in these gains and deepen digitalisation, to help businesses, citizens and society seize opportunities and thrive as we build a globally competitive Digital Economy.

As Architects of Singapore's Digital Future, IMDA will continue to propel the growth of Singapore's Digital Economy through:

- Deepening enterprise and sector transformation through digitalisation
- Supporting tech and digital innovation, and growing tech talent
- Enabling progressive digital infrastructure, utilities and regulations
- Ensuring an inclusive and sustainable digital society

16% of firms are Digital Performers or Leaders in 2022, up from 11% in 2019, for the Digital Acceleration Index

91% of firms have adopted digital technology, an increase from 74% in 2018



Digital: A critical enabler for our economy

IMDA supports the development of the Information & Communications (I&C) sector, a key driver of the Digital Economy. The sector grew 12 percent in 2021, outstripping the 7.6 percent growth in the general economy, and now accounts for 5.6 percent of Singapore's GDP.

But that growth belies how technology has helped uplift everyone – the I&C sector has helped drive digitalisation across the rest of Singapore's economy, supporting businesses everywhere in reaping the benefits of going digital.

The IMDA-commissioned annual Digital Acceleration Index (DAI) survey by Boston Consulting Group found that the overall digital maturity of firms¹ in Singapore has improved since 2019. Businesses have benefited from cost savings or improved top line through staying digitally competitive and tapping new markets or customers.

State of Singapore's Digital Economy

How have we improved the digital maturity of firms? Through a three-pronged approach – first, by supporting sector-wide digital transformation; second, by ensuring there is help for individual companies to digitalise regardless of size or industry; and third, by helping more digitally enhanced companies further accelerate their growth.

Uplifting sectors through digital transformation

IMDA has been partnering sector leads to develop and execute their Industry Digital Plans (IDPs). There are now 20 IDPs across various sectors, which provide step-by-step sector-specific guides for SMEs to digitalise their businesses, improve productivity, develop innovative products and services, or expand overseas. Since 2017, over 80,000 SMEs have adopted digital solutions with support from IMDA's SMEs Go Digital programme. Of these, about a quarter came on board in FY21 alone.

We are working on refreshing these IDPs to deepen sector and enterprise digitalisation. Building on the initial foundation established by the current IDPs, the refreshed IDPs will strengthen focus on integrated solutions (both within and across enterprises), cybersecurity and data protection measures, and more advanced AI and data analytics functionalities for better and faster business decision-making and operations.

¹ Digital maturity of a company is categorised in four levels: Digital Starters (digital plans are rudimentary and ad hoc), Digital Literates (some roadmap plans and solutions in place), Digital Performers (business units coordinate to use digital capabilities successfully), and Digital Leaders (digital capabilities embedded into all functions, including innovation and R&D).



Digitalisation, a gateway to new markets

QSS Safety Products

With more than 6,000 safety products in its store, and a usually brisk movement of goods to Singaporean customers, QSS Safety Products thought it was in a good place to ride out the trying early days of the COVID-19 pandemic as a B2C seller. However, COVID-19's restrictions meant the 34-year-old brick-and-mortar company's footfall traffic fell drastically and it suffered a loss of sales during the initial phase of safety restrictions, as its customers could not access its physical store. It quickly realised it needed a new approach to sustain itself.

It looked to the world to buy its goods, and it answered. By integrating with B2B e-procurement partner Eezee – one of the pre-approved SMEs Go Digital solutions under the Wholesale Trade IDP – QSS pivoted into a B2B2C company, and quickly established itself as a global player in the B2B safety equipment market.

The result? By end-2021, sales had increased **almost 10-fold** compared to its prior B2C-only business, and **about 10 percent of their monthly sales** now come from global markets.

"We have never experienced a more difficult time than during the COVID-19 pandemic. Tapping on Grow Digital, QSS Safety Products continued serving our clients through a new digital channel. We will be leveraging Eezee.sg for opportunities to reach out to more customers in the global market."

— Mr Alvin Quek, BD Manager, QSS Safety Products

State of Singapore's Digital Economy

SMEs Go Digital Programme (In partnership with EnterpriseSG)

>2,500

SMEs have gone global across
>10 countries
with Grow Digital since 2020



~500 SMEs
adopted Advanced
Digital Solutions to deepen
digital capabilities and
integrate business operations



>37,000
SMEs took up Start
Digital solutions



>55,000
SMEs have adopted
digital solutions under
the Productivity
Solutions Grant (PSG)

State of Singapore's Digital Economy

Every company can be digital – it just takes a single step

While enterprises are generally advancing in their digitalisation journey, the pace is uneven. Some need more aid, or guidance. IMDA has therefore been scaling our reach to ensure every SME that wants to implement digital solutions can do so, through the new Chief Technology Officer-as-a-Service (CTOaaS) platform, under the SMEs Go Digital programme. Available since December 2021, CTOaaS is the one-stop platform that provides end-to-end support for SMEs by:

- Letting SMEs take stock of their digital readiness levels through a quick self-assessment test, which then identifies their digitalisation needs and gaps
- Allowing SMEs access to off-the-shelf solutions and compare them by their functions and subscription fees
- Connecting SMEs with consultants who can provide advice and/or help them implement their digitalisation projects

CTO-as-a-Service provides **>450** solutions to address needs of SMEs with different maturity levels and in various sectors



>4,000 SMEs already visited CTOaaS for help on digitalisation (as of Mar 22)



Opening up new possibilities with digitalisation

Pawsible

Pawsible provides developmental curriculum for dogs in the areas of music, art, agility and object recognition, amongst others. Without much understanding of its digitalisation needs and priorities, Pawsible decided to use CTO-as-a-Service (CTOaaS) to assess its digital readiness and identify digitalisation gaps. It then sought expert help from a digital consultant through CTOaaS to prioritise its digital needs and select appropriate solutions that best met its business needs.

With guidance from the digital consultant, Pawsible focused on its immediate business challenge of manually managing customers' profile information and appointment bookings, which was time consuming.

Using CTOaaS to assess possible solutions based on cost, features and ease of integration with its existing solution, Pawsible was able to easily select a Customer Relationship Management (CRM) system to better manage its interactions with customers online. Pawsible will be tapping on project management services from the digital consultant to manage the implementation of their CRM system, coordinate and integrate it with its existing solutions, and conduct training for staff. Pawsible projects that this will help the company be more efficient in its daily operations and **increase productivity by 30 percent.**

State of Singapore's Digital Economy

Grooming the next generation of standout leaders

As some need aid, others are charging ahead. For those who are more advanced in their digitalisation journey, the Digital Leaders Programme (DLP) by IMDA and Enterprise Singapore helps them re-design themselves from a digital-first perspective. We support them in developing and executing their digital transformation roadmaps; we also aid them in building their digital teams and capabilities to handle the transformation.

Companies onboard the DLP have access to a network of ecosystem partners and holistic range of programmes, such as masterclasses to infuse change management and innovation mindset, and tech discovery workshops and demo days to expose companies to the latest innovations and technology trends in their respective sectors.

Driving digital innovation for breakthroughs in products and services

We have also heard from enterprises that faced business or operational challenges which cannot be addressed through off-the-shelf digital solutions. For them, their innovation journey is difficult due to a lack of time and resources to search for the right solution. IMDA thus launched the digital innovation marketplace, Open Innovation Platform (OIP), which brings together demand-side problem statements and innovative technology supply-side solutions providers to solve challenges in the wider market.

More innovative digital solutions to boost breakthroughs in products and service delivery



The share of firms in the I&C sector introducing new products/services was **21.4%** in 2021, higher than the national average of ~16%.

IMDA has opened doors for Accredited companies to win over **2,000 projects**, from over **250 partners**, including Government and Enterprise projects.

IMDA also continues to support the next wave of high growth start-up and mid-tier tech companies that can build world-class frontier products to win customers, through initiatives such as IMDA's Accreditation Programme. The programme identifies high-potential, promising tech firms with innovative solutions and provides the accreditation to position them as qualified contenders to government and large enterprise buyers. IMDA then helps them secure project opportunities with government agencies through Greenlane procurement and quicker Proof-of-Concept deployment through IMDA's Tech Acceleration Lab. Beyond government agencies, IMDA also creates opportunities for these tech firms to serve innovation needs of both local and foreign enterprises, accelerating the growth for these tech firms, which helps them attract investments and funding.

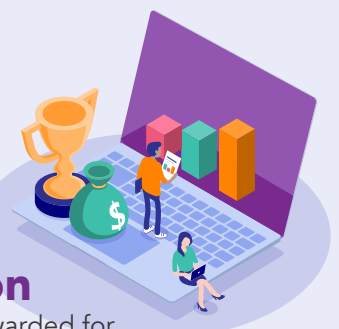
Since 2018, OIP has:



>300
challenge statements issued



>11,000
tech solutions providers
on-board



>\$9 million
in prize monies awarded for
successfully matching solutions
providers with problem statements

State of Singapore's Digital Economy



Keep growing: From a one-man street stall to an Asian food specialist

Bee Cheng Hiang

A household name not just in Singapore, Bee Cheng Hiang (BCH) has made its brand almost synonymous with 'bak kwa', or barbecued pork, after expanding beyond Southeast Asia in the early 2000s, to China, South Korea and Taiwan.

Through the Digital Leaders Programme (DLP), BCH gained greater awareness of the technology trends and opportunities in the Food and Beverages sector and had access to assistance on developing a tailored digital roadmap which established plans for workflow changes.

With greater appreciation of digitalisation, technology and digital economy opportunities, BCH is revamping its backend systems to support its omnichannel ambitions. The company projects **potential revenue growth of up to 50 percent** as a result of its digital transformation efforts, which would help it scale its global online business more efficiently, and make better business decisions through new internal digital capabilities in AI and data analytics.



Turning everyday problems into business opportunities through digital innovation

Vulcan.AI and Chye Thiam Maintenance

Valuing employees is to place their welfare and safety as a top priority. As an established integrated cleaning and waste management group that employs more than 1,800 employees, Chye Thiam Maintenance (CTM) wanted to ensure the safety of all its workers at all times, especially since most of them are working alone in remote areas.

Through OIP, Vulcan.AI was matched with CTM to develop a solution that automatically detects and sends out alerts if a possible slip, trip or fall happened. Not only did Vulcan develop this AI-based central safety monitoring software for CTM, it went above and beyond to design a wearable watch that embedded its AI solution.

Within six months, the solution was successfully commercialised and deployed. With workers across multiple work sites and in varied working environments, the solution allows CTM to have a centralised overview of its workforce safety and productivity improvement.

Today, the patented solution is used by enterprises from other sectors such as maritime, construction and even healthcare.

State of Singapore's Digital Economy



Accredited boost to win contracts

Wiz Holdings

"Automated customer service never sounded more natural" – for Wiz Holdings, it's a point of pride that 95 percent of customers who interact with its Talkbots never realise there is no human on the other end!

Wiz's chatbots' repertoire enables its clients to enhance customer experience at scale, as the automated bots reap clients the benefits of time, manpower and cost savings.

Wiz had a boost from IMDA's Accreditation programme as an accredited company, and was able to win customers from key sectors – such as finance and healthcare – where start-ups with little capital and proof of concepts were known to have challenges getting customers.

The results? Wiz saw a **200 percent growth** in 2020 over the previous year!

- Nurturing future-ready media talent and companies and equipping them with new media capabilities which capture global demand
- Building an agile industry that seizes the new digital media opportunities through utilising tech such as virtual production and AI



Shining bright in the global media scene

Beach House Pictures

Have you heard of CuriosityStream, Insight TV, or BiliBili? These are international content streaming platforms where Singaporean shows have been aired. With IMDA's support, Beach House Pictures, one of Asia's largest indie production companies, has been flying the Singapore flag high. It has been creating internationally renowned works, winning multiple awards such as the World Media Festival Gold Award, New York Festivals TV & Film Gold Award, and the Asian Academy Creative Gold Award.

At the same time, Beach House Pictures has been training and upskilling the local media industry, alongside attracting international platforms to co-produce premium scripted and documentary titles with the local ecosystem in Singapore.

Beach House Pictures recognises that its viewers continue to evolve, hungry for the next big show. It has thus begun leveraging data to better understand viewer tastes and trends, while continuing to tell compelling stories to the world.

Capturing economic opportunities in the media space

IMDA also helps the media sector capture opportunities in the growing digital economy. As the world changes the way it consumes media, IMDA has been supporting the local media sector and talent in addressing changing consumption patterns – by exploring new partnerships and helping firms build capabilities in the digital media space.

We will continue to help grow the media ecosystem in Singapore to punch above its weight through:

- Developing leading media companies that innovate in content and IP creation that tap new markets, capture new demand and produce content with global appeal

State of Singapore's Digital Economy

Growing local creatives



Scrawl Animation

Started as a local media production and animation company in 2002, Scrawl has quickly established a track record of producing quality animation entertainment for the global market, be it for television, mobile or the internet. Within the span of a few years, Scrawl developed, produced and sold original shows to international broadcasters and formed strong alliances with some of the most respected names in kids' entertainment.

Its most recent notable project is partnering with French animation studio Cyber Group Studios, to develop 'Alex Player'. It breaks new ground as Singapore's first long-form animated series produced via the Unreal Engine¹.

¹ The Unreal Engine is the world's most open and advanced real-time 3D creation tool for photorealistic visuals and immersive experiences.



One Animation

A local Emmy award nominated Computer Graphics (CG) animation studio, One Animation's content is broadcasted in over 180 countries worldwide and on platforms like Disney, Cartoon Network and Netflix.

IMDA has supported One Animation over the years to create original IPs, including three-time Emmy Award nominated animated series 'Oddbods', and has helped to facilitate its growth. Its most recently developed iteration, 'Oddbods: Busy Bodies', utilises a live-action-animation hybrid format to promote imaginative play, physical activity and mindfulness among children, and relieve the stress that they may have faced during the COVID-19 pandemic.

One Animation's success saw it recently acquired by Moonbug Entertainment, a global entertainment company. Together, it plans to expand 'Oddbods' internationally by moving it into new formats, consumer products and experiences, while remaining anchored in Singapore, tapping local talent and building local media capabilities.

Connecting all Singaporeans

IMDA also supports the production of a diverse range of quality Public Service content with a distinct Singapore flavour that is accessible to and resonates with Singaporeans, with some having garnered international recognition.

Not only are these international accolades testament to the quality and appeal of local content produced by Singapore's media industry and creative talents, they also instil a sense of pride in Singaporeans.



State of Singapore's Digital Economy



Streets of Memory 3

Mediacorp

Singapore has a rich history which, while young, already has parts lost to time. Interesting road names with historical meanings are lost on the young. Streets of Memory is a TV series which dives into this lost past of several such street names and the stories behind them.

The documentary, blending exposition interspersed with stories shared by local Singaporeans, was a hit. It clinched the Gold Award in the Craft: Program's Best Graphic Design category in 2021's New York Festivals TV & Film Awards. Alongside it, the show also won two bronze awards in both the Documentary: History and Society, and Craft: Promotion/Open & Independent categories.

From 2017 to 2021, tech jobs across the economy grew from 155,000 to **~195,000**

5.6% compounded annual job growth – higher than most of the economy (2017-2021)

>1/2 of 2021 tech jobs in non-I&C sector – as more companies build digital capabilities and digitally transform

Resident tech talent commands good wages in 2021 –

~1.6 times that of overall median resident wages



Realising aspirations and nurturing local tech talent

Even as Singapore pushes ahead, it needs to nurture and take care of one key resource – its people. Demand for tech talent has grown exponentially as the world digitalises, and there are exciting economic and job-creation opportunities for countries poised to seize these talents.

We have been helping our workforce, both current and future, prepare for this through upskilling and re-skilling to meet current demands, while growing a pipeline of future-ready next-generation talent.

Renewal through upskilling

For existing tech workers and mid-career professionals from other fields wishing to switch into the tech field, IMDA places and trains them through the TechSkills Accelerator (TeSA) programme. The skills that Singaporeans gained have placed them on par with global tech talent, and we have seen successful results since TeSA's launch in 2016. Since then, about 12,000 individuals have been placed and trained into tech jobs and approximately 160,000 individuals upskilled through tech courses to gain new skills.

State of Singapore's Digital Economy

For example, the Singapore 5G & Telecoms Academy upskills tech talent with skills needed to work on 5G and future communications, with about 4,000 individuals trained in 5G and related skills.

IMDA continues to support training development, and is also focused on growing higher value jobs in areas such as AI, cybersecurity and product development.

Nurturing a strong pipeline of local tech talent

As we reskill the workers of today, IMDA is preparing the next generation of workers for the digital economy of tomorrow, including enhancing opportunities for students from universities, polytechnics and the Institute of Technical Education (ITE) to kickstart and develop their tech careers. We will work with industry partners through TeSA for ITE and Polytechnics to facilitate apprenticeship, internship and work-study opportunities to further develop their tech capabilities and bring 1,000 ICT jobs to polytechnic and ITE graduates over three years.

~7,000 students graduate annually from ICT courses at our universities, polytechnics and ITE



Intake into ICT courses in our Institutes of Higher Learning (IHLs) have grown to **14%** of the total cohort in academic year 2020, vs 11% in 2015



Mid-career digital switch

Nazeer Basir, Cloud Solutions Architect

When 41-year-old Nazeer Basir saw the potential that a tech career could bring, TeSA was there for him.

The Google Skills Ignition Singapore (SIG) programme helped Nazeer to successfully make a mid-career switch by upskilling him with cloud qualifications and giving him relevant experience and exposure in the tech industry. Encouraged to pursue lifelong learning, Nazeer took up different certifications in Amazon Web Services and Microsoft Azure outside his on-the-job training to work towards his goal of becoming a cloud architect.

Even before graduating from SISG, Nazeer secured a job as a Cloud Operations Engineer, where his role was to ensure that cloud services in Singapore were functioning well around the clock. He was heartened to be able to contribute to Singapore's growing digital industry.

Nazeer is now working as a Cloud Solutions Architect at a global firm. He is responsible for the daily IT operations of application systems to achieve high availability. And he is still eager to find new digital skills to pick up!

State of Singapore's Digital Economy



Don't give up, your digital future awaits you

Dhiyana Shree Vajiravelan, Project Engineer at Wipro Pte Ltd

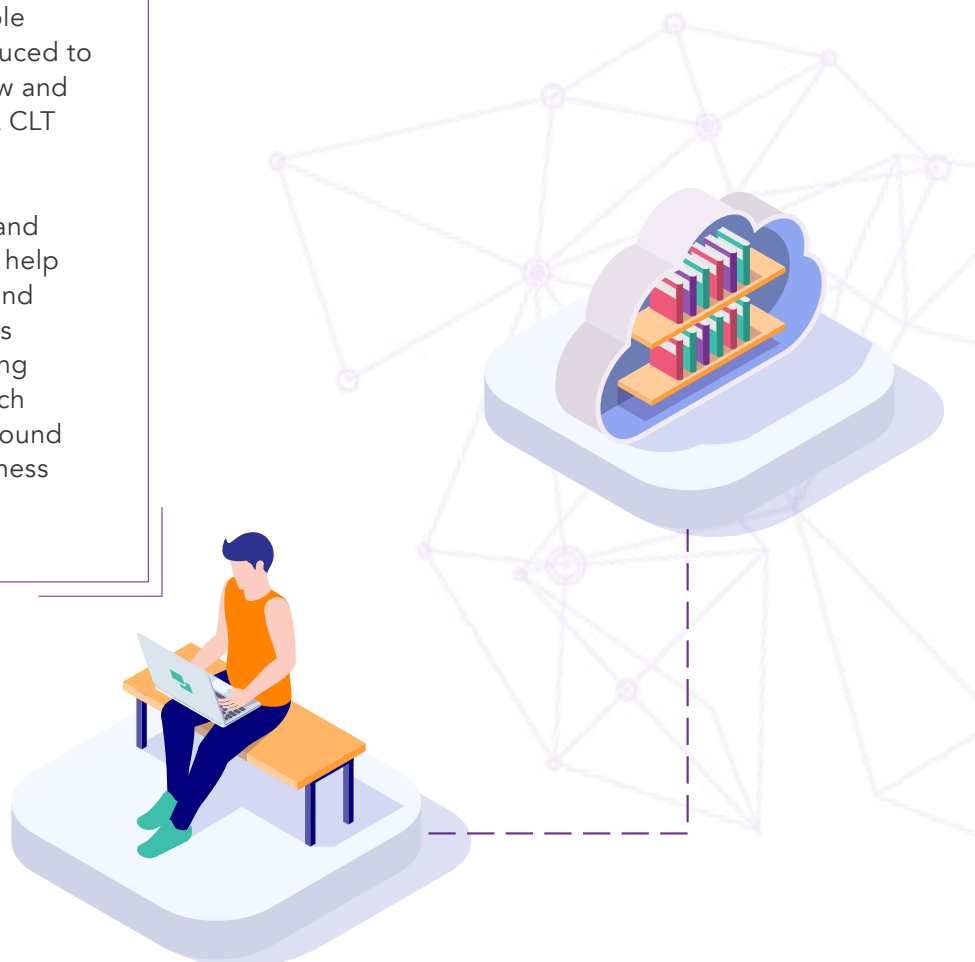
Dhiyana began looking for jobs upon graduation from the Institute of Technical Education (ITE). She applied to multiple companies, and was eventually introduced to Wipro, where she passed the interview and necessary tests and got into the TeSA CLT programme as a Project Engineer.

Though she had no work experience and minimal industry knowledge, with the help of training from Wipro management and trainers, she learnt useful technologies that she now applies to her work, giving her courage to further develop her tech capabilities. Today, she uses her newfound skills to help clients adapt to the business changes in the digital world.

Building strong foundations – investing for the future

All the above successes of our workers and companies are built on continued investments into our digital foundations – the hard infrastructure pumping data through cables around the world; and digital infrastructure that enables businesses to transact seamlessly and safely. The infrastructure bedrock of the digital economy are the digital and data highways that facilitate businesses' digital transactions, and Singapore is committed to ensuring we continue to build new foundations, while reinforcing existing ones.

We have consistently remained at the forefront of digitalisation with accessible, state-of-the-art, secure and resilient wired and wireless infrastructure. It has enabled businesses to transact seamlessly locally and globally. We will continue to enhance our fibre and wireless networks, and also ensure their resilience. We are currently exploring means to upgrade our fibre broadband network – potentially increasing speeds by around 10 times over the next few years.



State of Singapore's Digital Economy

OVER LAND, SEA AND AIR

Powering ahead as Asia's leading subsea, mobile and broadband infra hub

**1st globally for
Technological Infrastructure**

According to the IMD World
Competitiveness Ranking 2022

**Top 3 World's
fastest broadband
network nation**

Based on median download
speeds, according to
Speedtest Global Index
by Ookla

**1st for 4G
network coverage**

According to Economist
Intelligence Unit 2021 –
Technology and Telecoms
Annual Report

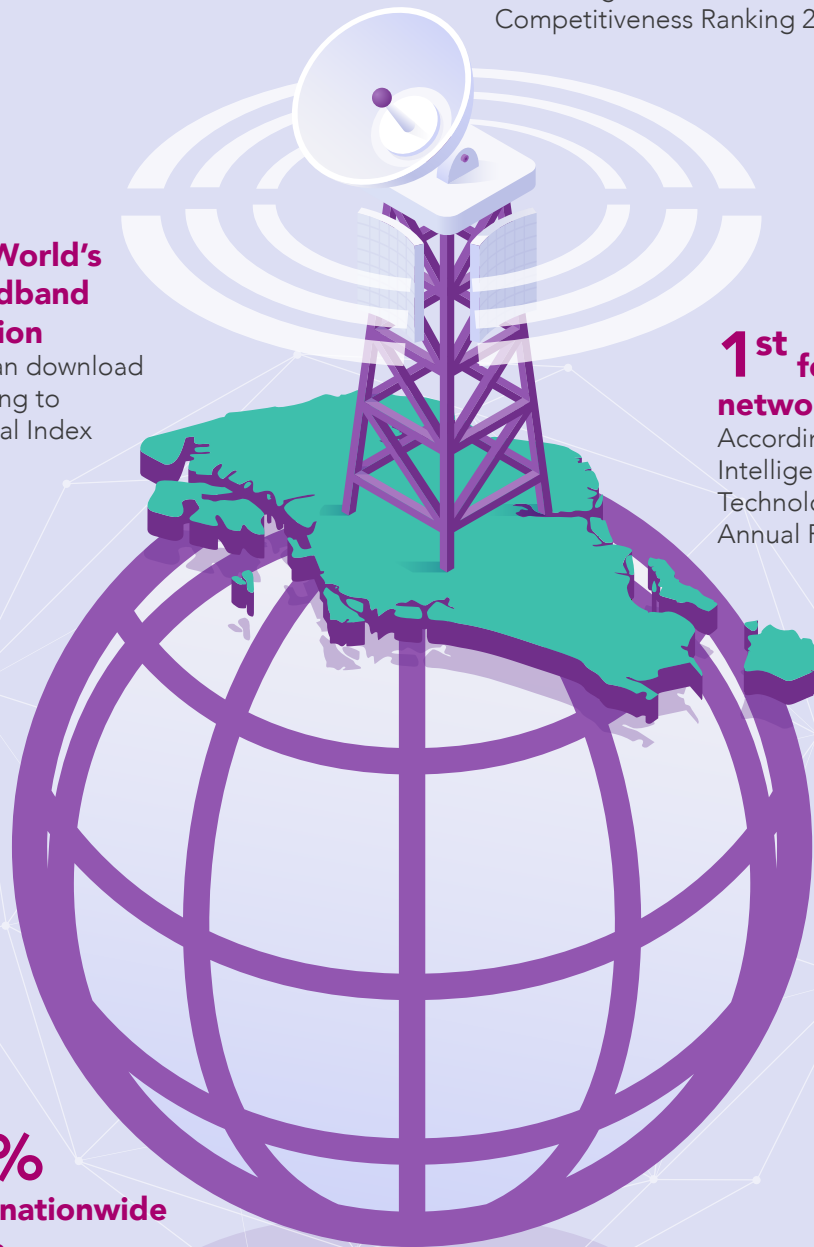
>50%

**outdoor nationwide
coverage**

for 5G standalone networks
by end-2022, ahead
of schedule

**Regional submarine cable hub with
26 submarine cables**

connecting to many countries, via direct
and indirect routes



State of Singapore's Digital Economy

Pushing boundaries in frontier technologies

Singapore also recognises it must invest in future technologies, pushing the boundaries in frontier tech critical for the Digital Economy, such as in Future Communications, AI and Trust Technologies.



Global market potential in 5G applications for the advanced manufacturing sector

IBM, Samsung, M1

Augmented Reality (AR) – to some, a fad, yet to others, a means to overlay new data and information onto the real world. For IBM, the benefits of AR include being able to take new visualisations and data streams anywhere and allowing engineers to check manuals without having to tote around hefty physical tomes.

But to get the near real-time reactions and speeds necessary for AR to perform requires speed – specifically mobile speeds. 5G is the answer. IBM, Samsung and M1 partnered IMDA for Singapore's first 5G Industry 4.0 trial at IBM's manufacturing sites to see how AR could speed up assembly processes and automate inspection processes.

The trials indicated the new 5G-enabled AR solution could save IBM **up to 20 percent in training costs, improve training efficiency by 50 percent and improve overall productivity.**

The solution is now being deployed by IBM globally, starting with its Poughkeepsie New York plant in 2022.

Future Communications underpins the Digital Economy

While our 5G rollout is progressing ahead of schedule – with half of Singapore already covered today and on track for island-wide deployment by 2025 – we recognise that practical use cases remain low, as enterprises continue to test how best to make use of 5G's massive jump in speeds. There have been early trials since 2019 with promising results from our 5G Innovation Grant programme, which sought to show how 5G's technical use cases could benefit enterprises.

Moving ahead, we will focus on accelerating the commercialisation of 5G solutions by tech providers and adoption from enterprises, with a further \$30 million to be invested in 5G innovation.

Facilitating AI investment and innovation for AI capable companies

IMDA's Survey of Infocomm Usage in Enterprises found that companies that invested in AI reported revenue increases and breakthroughs in creating new products and services. But we can do more, especially for smaller firms where the level of AI adoption has been modest. A key challenge smaller firms face is scalability – AI solutions are only as good as what firms can feed them. To get a great AI solution requires sufficiently large datasets to train the AI algorithm, so that it properly recognises patterns. This is a difficult hurdle for small firms that wish to adopt AI solutions, and also for smaller tech firms keen to develop new AI products. IMDA has thus been making available reusable AI models to enable AI product development and operationalisation at scale.



State of Singapore's Digital Economy



Enhancing competitiveness of innovative technology providers through emerging technologies

EPOS and Webcada

The perennial challenge for tech companies bent on utilising the latest technology is talent – companies need trained staff, and the resources to create leading-edge solutions such as AI-enabled products. So how did EPOS' point-of-sales system and Webcada's e-commerce solution, integrate AI without an AI team on hand?

They were supported by IMDA, which had developed easily adoptable, reusable AI models, assets and algorithms. One such reusable AI asset is an algorithm for a Retail Recommendation Engine module. EPOS and Webcada then customised and integrated the AI module into their products – in turn allowing their clients the ability to offer AI-personalised recommendations for their clients' end-customers during the product selection phase or at the point of purchase. For EPOS, for example, it enabled them to scale an AI solution to their customers instantly.

This showed EPOS and Webcada the boost AI could bring, and gave them the confidence to invest further into their tech capabilities and create more sophisticated solutions to win customers. Both companies now have teams working with live data and training larger data sets to advance their solutions.

Growing Trust in Digital

The growth of digital and data transactions requires a commensurate growth in digital trust. Such trust – the confidence users have in the technology and processes behind a digital product or service – calls for a greater need to ensure that systems we use will remain secure, fair, and protect user privacy. Enter a new field of tech – Trust Tech. Our early work began when we launched the world's first AI Governance Model Framework in 2018. The Framework sets out how Singapore envisions AI algorithms could be implemented to create transparent, fair, human-centric and ethical results and was the first step in Singapore's contributions to the development of international standards on AI governance. This year, we launched the world's first AI Testing Framework and Toolkit for companies to demonstrate responsible and transparent AI and build trust with their stakeholders.

To complement this, IMDA is also ramping up trials and Proof of Concepts (POCs) into Privacy Enhancing Technologies (PETs). PETs are cryptography-based technology solutions that safeguard privacy and provide confidence to businesses and individuals by ensuring that personal data is not disclosed in data analysis or transmission. This helps address industry concerns around risks of traditional data sharing, and open opportunities for B2B data collaboration, cross-border data flows, and making more data available for AI.

Facilitating seamless digital and data flows – building up digital utilities

Digital services are increasingly key in business processes – much like the digital equivalent of water or electricity utilities. IMDA is investing in the development of such Digital Utilities (DUs) which are 'plug-and-play' digital services designed to allow secure digital transactions and data flows in business functions, to enable our local businesses to be digital, and eventually go international, from the start.

State of Singapore's Digital Economy

The Government has invested in building the following suite of DUs:

- Identity and authentication – the Government's national digital identity DUs, Singpass and Corppass, serve to authenticate digital transactions across citizens and businesses
- Invoicing and Payments – InvoiceNow and PayNow enable seamless digital invoicing and e-payments for businesses and consumers
- Attestation & Authenticity – TradeTrust comprises a set of globally accepted standards and frameworks that connect governments and businesses to a public blockchain to enable trusted interoperability and exchanges of electronic trade documents across digital platforms
- Data Exchange – SGTraDex facilitates trusted and secure sharing of data between supply chain ecosystem partners; SGFinDex allows convenient sharing of financial data across different government agencies and financial institutions

InvoiceNow

>50,000

businesses on the InvoiceNow network

All government agencies can receive InvoiceNow e-invoices

70%

of government invoices can be issued through InvoiceNow



World's First AI Governance Testing Framework and Toolkit

AI Verify is another step forward in Singapore's contributions towards international AI standards. As a free plug-and-play system, it is the first of its kind to help companies demonstrate if their AI algorithms can perform in a responsible and fair manner.

While IMDA expects to continue to refine and enhance AI Verify, it showcases how very soon, companies using AI algorithms could easily demonstrate why their products' results should be trusted and thereby further win the trust of clients and customers.

Companies from different sectors and of different sizes have already tested and/or provided feedback, including Amazon Web Services, DBS Bank, Google, Meta, Microsoft, Singapore Airlines, NCS (Part of Singtel Group), Land Transport Authority, Standard Chartered Bank, UCARE.AI and XOPA.AI.

In addition, Singapore is engaging other like-minded countries and partners to enhance the interoperability of AI governance frameworks and develop international standards. Beyond the pilot stage of the Minimum Viable Product (MVP) testing framework, Singapore also aims to work with AI system owners/developers globally to collate and build industry benchmarks.

State of Singapore's Digital Economy



Digital Utility for Singapore's supply chain ecosystem

Alliance for Action on Supply Chain Digitalisation

Today, businesses across the global supply chain operate in fragmented and disparate silos, resulting in poor information flows and inefficient operations. Through the Alliance for Action (AfA) on Supply Chain Digitalisation, the private sector, together with public agencies like MTI and IMDA, came together to enhance Singapore's supply chain agility, transparency and platform interoperability through a concerted push towards digitalisation.

The Singapore Trade Data Exchange (SGTraDex) was conceptualised as a way to address long-standing inefficiencies by allowing various systems and players in the supply chain journey to easily exchange data in a trusted and secure environment. SGTraDex focused on three initial use cases to demonstrate its value proposition: (a) trade finance fraud detection, (b) container flow node decongestion and (c) bunker optimisation.

Following the successful use case pilots, more than 70 participants, representing stakeholders across the supply chain ecosystem, have been onboarded. SGTraDex was officially announced by DPM Heng Swee Keat at the Asia Tech x Singapore (ATxSG) Summit on 13 July 2021 and launched operations in June 2022. Based on existing participants, the initial three use cases are expected to capture **about \$100 million of value by 2026**, through cost savings from improved efficiency and productivity, optimal use of assets, faster access to financing, and other value-creating benefits.

Expanding international economic space through digital collaborations

Our strong digital infrastructure, digitally capable companies and talent, cannot thrive on just being present and excelling in Singapore. As befitting our hub status, we see ourselves as connectors, helping businesses both within and outside Singapore connect with one another; or by bringing in the right international minds to help further drive, develop and discuss the difficult questions technology brings to the fore of society.

In the first area, we are working on establishing Digital Economy Agreements (DEAs) – which forge the recognition of digital technologies and cross border data flows between countries. This is vital as the digital global trade rules are nascent and need consensus, and allows Singapore to help set the agenda of the international digital economy space, especially against the backdrop of shifting geopolitical dynamics in recent years.



Shaping global digital rules and norms

DEAs are legal treaties between two or more governments. They establish new digital trade rules and facilitate digital collaborations of systems and standards – such as e-invoicing or digital documents – so that companies across both jurisdictions can transact seamlessly and legally.

DEAs are critical as these digital standards and norms are still nascent, yet necessary to give enterprises the stability to engage in digital trade and commerce.

Singapore has concluded **four** DEAs with:

- Chile and New Zealand
- Australia
- United Kingdom
- South Korea

State of Singapore's Digital Economy

We have done so with many like-minded countries also moving in this direction. The DEAs we have signed have facilitated market access for businesses and made digital transactions and cross-border flows of data for businesses possible across several jurisdictions.

Singapore – the meeting space to discuss the Digital Economy

There are still other areas, however, where consensus have yet to be fully forged. And thus, Singapore brings our value as a trusted, neutral party to host such global discussions. The annual ATxSG creates a unique opportunity for government and

industry to have in-depth conversations with global and Asian perspectives, covering topics to shape our shared digital future, including policy, data flows, sustainability and emerging technologies and ecosystems. This helps lay the foundation for cooperation with like-minded partners to advance common interests on an international stage.



INAUGURAL ATxSG 2021 CONVENED GLOBAL THOUGHT LEADERS



State of Singapore's Digital Economy

Progressive regulations to safeguard public's and businesses' interests in a digital future

While a digital future is laden with opportunities, it also brings risks such as data breaches, security threats and online harms. Consequently, IMDA regularly reviews the policies and regulations safeguarding consumers' and businesses' interests to ensure they are progressive, balancing consumer safety alongside reasonable business needs.

These include the Personal Data Protection Act amendments which took effect in phases from February 2021, to enhance protection of consumers' personal data, balanced with facilitating businesses' need for data use.

Despite ongoing efforts that service providers and agencies have undertaken to protect our online users, there is also another rising concern – the ease with which harmful content is disseminated online. To raise

the standards of online safety for vulnerable youths, IMDA is now reviewing and developing Codes of Practice to enhance online user safety. Together with our Ministry of Communications and Information, we are engaging the public and various stakeholders to seek their views on enhancing protection against online harm such as endorsing acts of terrorism, hateful acts against communities, suicide, self-harm, and several more. The proposed Codes call for greater accountability on the part of social media platforms. This is one of IMDA's key policy and regulatory focuses ahead, given the rapid pace at which the dissemination of such content is evolving.

Digital for Life – building a safe and inclusive digital society

Ultimately, we are working to ensure that all Singaporeans can thrive and lead a fulfilling life in the digital world. Today, while we have high levels of broadband and mobile adoption, there is more to be done to encourage all Singaporeans to embrace Digital for Life. Beyond digital tools and skills, it is a journey where the government, private sector and communities can come together to support citizens from all walks of life to use digital to enrich their lives.

ENHANCED PERSONAL DATA PROTECTION ACT

Strengthening consumer trust through mandatory data breach notifications

Reinforcing consumer protection from unsolicited commercial communications



Supporting data use for innovation, e.g. business improvement, Research & Development, contractual performance

State of Singapore's Digital Economy

HIGH LEVELS OF DIGITAL ACCESS

Singaporeans have access to Internet and digital devices



99%
of households have
broadband access

94%
of individuals
use the Internet



92%
of individuals
use smartphones



88%
of individuals
use e-payments



State of Singapore's Digital Economy

SINGAPOREANS EMBRACING DIGITAL FOR LIFE

>110 3P Partners supporting the Digital for Life movement

Raised **\$8.4m** for ground-up digital inclusion initiatives

Enabling **22** ground-up projects including:

- Educating youths on digital wellness, cybersecurity and digital tech skills; and
- Empowering seniors and persons with disabilities to navigate and embrace digitalisation



DIGITAL FOR LIFE FESTIVAL

Attracted close to **30,000** participants across Suntec City Convention Centre, Heartbeat@Bedok, online webinars and about **60 community pop-ups**



State of Singapore's Digital Economy



Empowered, now empowering others

BYTE (Bringing You Technology Empowerment)

BYTE is a volunteer-led project group helping youths from lower-income families get exposed to and understand technologies such as augmented reality via the use of interactive online tools which teach science and tech topics.

BYTE started its operations in Yishun, reaching out to school-going children from rental flats. With the support of the DfL Fund, BYTE saw enthusiastic success from youths and has now scaled services across the rest of the nation.

With the support of IMDA's Digital for Life Fund (DfL Fund) and community partners, BYTE is all geared up to help children bite into technology in a fun and empowering manner that builds their digital confidence.

Supporting seniors, hawkers and heartland merchants to embrace digital

Through the SG Digital Office launched in 2020, IMDA has also introduced initiatives to support segments of society that require greater help in going digital.



Trained
>150K seniors
in basic digital skills
such as using their
smartphones



Supported

>11,000 hawkers and

9,000 heartland merchants

to adopt e-payment such as
PayNow and SGQR



State of Singapore's Digital Economy

Embracing digitalisation and thriving on change

Patrick Sze, Chairman of the Clementi Centre Market Hawkers' Association; stall owner of Snow Mount Goreng Pisang at the Clementi Market & Food Centre

Patrick is an inspiring story of someone who went from being resistant to technology, to being a digital advocate. He was one of the first hawkers to adopt SGQR and subsequently influenced his fellow hawkers to do likewise. He also adopted the RedeemSG App and is on the WhyQ hawker food delivery platform – showing how quickly he has embraced technology to help increase his own stall's productivity.

As a Digital Hawker Champion, Patrick is a key driver behind the Facebook page of Clementi 448 Market & Food Centre, a page set up to strengthen the centre's digital presence and reach out to more customers. Patrick worked with students from the Singapore University of Social Sciences to create content for the Facebook page by profiling hawkers from the food centre. Their hard work paid off, as one stall reported a 15 percent increase in sales after a post promoting their food was published!

Patrick also set up a local Digital Support Group (DSG) with the mission to make life easier for the hawkers through tech. Moving forward, he hopes to change the mindset of his fellow hawkers, believing that they need to adapt and adopt digitalisation as the world evolves with more customers preferring to pay digitally.



The Digital Future is bright

There is much yet to be done to propel the next bound of Singapore's Digital Economy growth. This state of the Digital Future cannot be done alone by IMDA, and we will continue to work in partnership with all – citizens, talents, industry and international partners alike.

We believe we are stronger together. And together, we will be able to achieve more in deepening enterprise digital transformation; creating digitally innovative solutions; nurturing a future-ready workforce; establishing progressive regulations; and ensuring an inclusive and sustainable digital society for all.

Last, but not least, IMDA is also taking steps towards building a more sustainable future, by tracking our own environmental footprint and paving a more sustainable growth of our organisation, while studying and exploring opportunities for digitalisation to support the sustainable development of the Digital Economy.

Green Digital Architects

In support of the Singapore Green Plan 2030, IMDA recognises the importance of sustainability development and is taking more steps to track our environmental footprint.

With 2019 as the base year, we have estimated our carbon profile, which includes our direct and indirect

emissions due to the consumption of energy (Scope 1 and Scope 2), as well as indirect emissions attributed to our activities (Scope 3 - some examples include employee commuting, business travel, procurement of goods and services). These preliminary estimates are reflected in the table below:

Emissions (tCO₂e)*	FY2019 Amt (% of Total)	FY2020 Amt (% of Total)	FY2021 Amt (% of Total)
Scope 1 – Direct emissions from owned or controlled sources	17 (0.2%)	0 (0%)	2 (0.04%)
Scope 2 – Indirect emissions from the generation of purchased energy (i.e., electricity consumption of IMDA HQ)	529 (5%)	399 (7%)	398 (7%)
Scope 3 – Indirect emissions that occur in value chain of organisation's activities	9,226 (94%)	4,933 (93%)	5,296 (93%)
Total Emissions	9,773	5,332	5,697

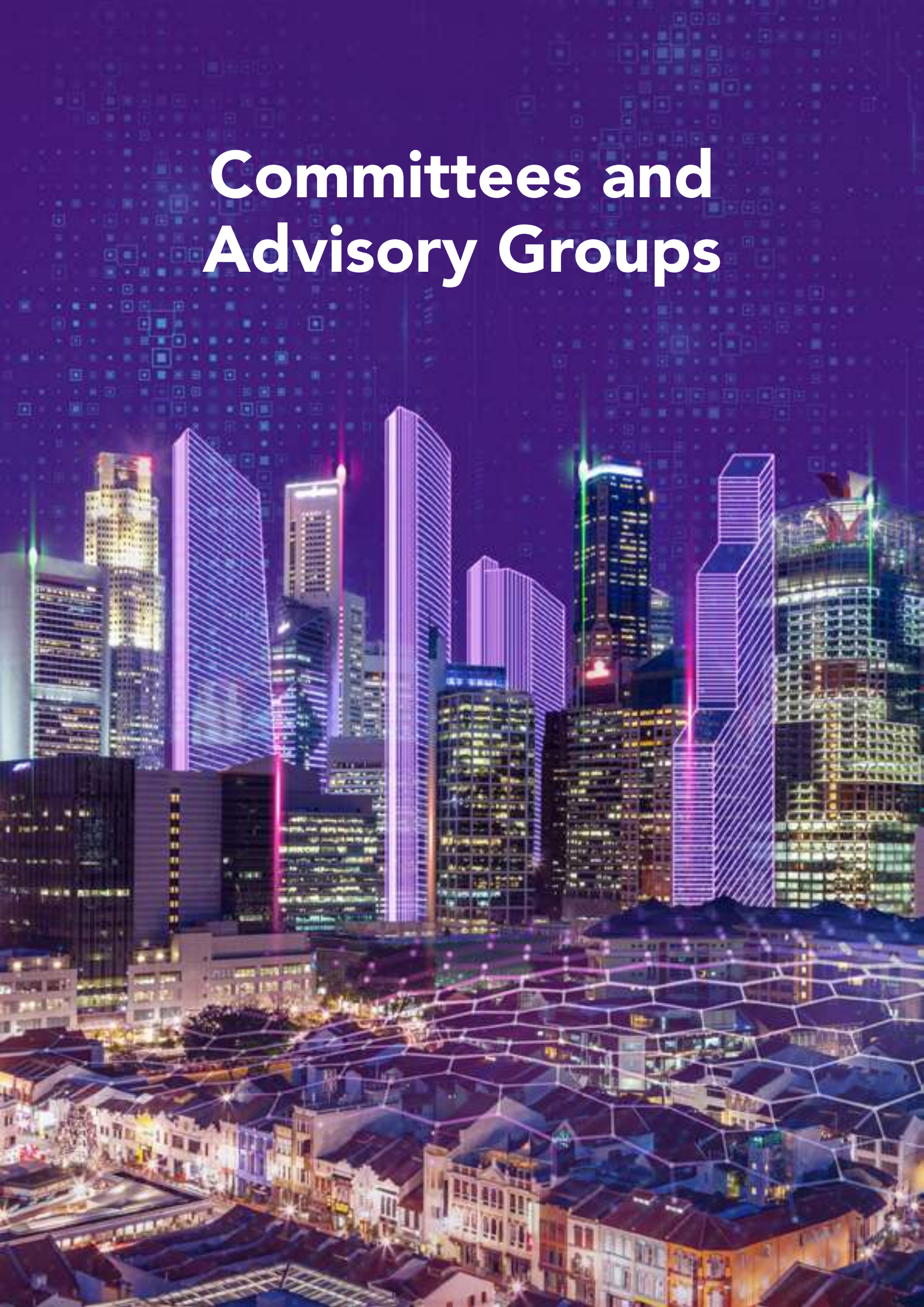
Scope 3 emissions are often the most challenging to measure, given the different standards and methodologies available to estimate such emissions. However, we recognise that these are not insignificant, and it is important to consider how such emissions can be reduced.

In line with the GreenGov.SG movement that sets measures and targets to cut carbon emissions across the public sector, IMDA is committed to measuring our emissions comprehensively and reducing our emissions. Some examples include exploring the use of sustainable fuels for our vehicular operations, reviewing procurement policies to procure ICT equipment and goods and services from more sustainable sources, and reducing waste (e.g. reducing paper usage).

Through this nascent effort, we have gained first-hand insights into the challenges faced by companies and organisations in measuring and tracking emissions. This will inform our ongoing studies to help the I&C sector achieve sustainability, and to use ICT and digital solutions to help other sectors achieve sustainability in the digital economy.

** Emissions calculations are based on IMDA HQ operations which forms the bulk of IMDA Group emissions, excluding IMDA subsidiaries and non-HQ office location. IMDA engaged an external consultant to advise on emissions baseline and inventory calculations and IMDA measurement methodologies is in compliance with the GreenHouse Gas (GHG) Protocol.*

Committees and Advisory Groups



IMDA Advisory Committees

Advisory Committee for Chinese Programmes (ACCESS)

CHAIRPERSON

**Assoc Prof
Foo Tee Tuan**

Director,
Centre for Chinese Studies,
Singapore University of Social Sciences

VICE-CHAIRPERSON

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Lawyer,
Marcus Phuah & Co.

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Finexis Advisory

Mr Alan Li Weilun

Content Strategist and Consultant,
Septus Singapore Pte Ltd

Ms Annabelle Teo Li Fong

Senior Manager,
Ministry of Education

Mr Choy Long Kai

Part-Time Lecturer

Mr Chung Kwang Tong

Secretary-General,
Quan Zhen Cultural Society (Singapore)

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Business Owner and Media Personality,
Danny Yeo Pure Talents

Ms Diana Ser

Business Owner and Media Personality

Ms Giselle Yen Qianyong

Administration Executive,
BW Monastery

Mdm Heng Boey Hong

Director,
Mother Tongue Languages Branch
Curriculum Planning and Development
Division, Ministry of Education

Ms Iris Lin Liping

Senior Assistant Director,
Fei Yue Community Services

**Mr James Teo
Cher Cheong, PBM**

Businessman

Ms Jovis Ang

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Quality Service,
Ministry of Law

Mr Lee Ee Wurn

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Singapore Chinese Cultural Centre

Dr Liew Kai Khiun

Cultural Researcher

Mr Ray Ng

Digital Content Editor (Podcast),
Chinese Media Group,
SPH Media Ltd

Ms Samantha Loh

Senior Lecturer,
School of Management and Communication,
Republic Polytechnic

Mr Su Zhangkai

Honorary Secretary,
Nam Hwa Opera Ltd

Ms Wong Pei Wen

Lecturer,
Wee Kim Wee School of Communication
and Information,
Nanyang Technological University

IMDA Advisory Committees

Advisory Council on the Ethical Use of AI and Data

CHAIRPERSON

Mr V K Rajah, SC

Former Judge of Appeal and the Attorney General of Singapore, Duxton Hill Chambers (Singapore Group Practice)

MEMBERS

Mr Andreas Ebert

Worldwide National Technology Officer, Microsoft

Mr Andrew Wyckoff

Director of the Science, Technology and Innovation Directorate, OECD

Mr Blaise Aguera y Arcas

Engineering Fellow, Google Research

Mr Chia Song Hwee

Deputy Chief Executive Officer, Temasek International

Dr Francesca Rossi

Fellow and AI Ethics Global Leader, IBM

Dr Hiroaki Kitano

President and Chief Executive Officer, Sony Computer Science Lab

Dr Ieva Martinkenaite

Vice President and Head of AI and Analytics, Telenor

Ms Kathy Baxter

Principal Architect, Ethical AI Practice, Salesforce

Ms Kay Firth-Butterfield

Head of AI and Machine Learning and Member of the Executive Committee, WEF

Mr Li Chun

Group Chief Executive Officer, Lazada; Vice President, Alibaba Group

Mr Piyush Gupta

Chief Executive Officer, DBS Group

Mr Shameek Kundu

Head of Financial Services and Chief Strategy Officer, TruEra Inc

Dr Tan Geok Leng

Chief Executive Officer, AIDA Technologies

IMDA Advisory Committees

Arts Consultative Panel (ACP)

CHAIRPERSON

Mrs Laura Hwang Cheng Lin

Managing Director,
Memories of The East Pte Ltd

VICE-CHAIRPERSONS

Mr Albert Lee K. H.

Co-Founder and Director / Principal Consultant,
QCOM BizSolutions Pte Ltd

Mr Jacky Foo

Board Member,
TAL Group

MEMBERS

Mr Alvin Yeo Han Yong

Educator,
Ministry of Education

Mr Eric Watson

Composer,
Conductor & Pedagogue

Dr Joel Gn Hongzhan

Adjunct Lecturer,
Nanyang Academy of Fine Arts

Ms Amy Tan

Managing Director,
The Pink Pencil

Ms Fajaria Binte Muhammed Fajari

Homemaker

Mdm Khoo Ming Fern

Consultant (School Excellence),
Schools Division

Mr Andrew Yap

Business Consultant

Mr George Lim Hock Seng

Retiree

Mr Koh Chee Hui

Vice-Principal,
Nanyang Junior College

Mr Ang Song Nian

Lecturer,
School of Art,
Design and Media,
Nanyang Technological University

Mdm Hanim Mohd Salleh

Assistant to the Editor,
Berita Harian,
Singapore Press Holdings

Mdm Leau Wan Hwee

Educator

Ms Chew Wei Shan

Independent Artist

Mr Jack Kenneth Tan Kun Yan

Production Assistant,
Centre for Contemporary Art Singapore,
Nanyang Technological University

Mdm Lim Sok Geok

General Manager,
Marine Parade Clinic Holdings Pte Ltd.

Ms Chong Xiu Min

Subject Head / Aesthetics,
Alexandra Primary School

Dr Jasbir Singh

Director,
President's Office,
Nanyang Technological University

Mr Lim Zong Wei Alex

Director,
AudioLocket Pte Ltd

Ms Christie Lieu Hui Xian

Operations Manager,
Core Concepts Pte Ltd

Dr Margaret Chan

Retiree

Dr Elmie Nekmat

Assistant Professor,
Communications and New Media,
National University of Singapore

Ms Jennifer Goh Yi Mei

Co-Founder,
Blossom World Society

Mr Maurice Alphonso

Scientist,
Plexchem Technologies Pte Ltd

Mr Jeremy Chu Chan Peng

Independent Arts Practitioner

IMDA Advisory Committees

Arts Consultative Panel (ACP) cont'd

MEMBERS

Ms Ng Wei Chin

Director and Producer,
Light Carriage Productions

Ms Nurul Amalina Binte Jamaludin

Manager,
Communications and Engagement,
Engagement and Research Division,
Ministry of Education

Ms Ong Zhen Min

Director,
Artwork and Exhibition Management,
National Gallery Singapore

Mr Ow Yeong Wai Kit

Education Officer,
Ministry of Education

Dr Robert Liew

Director,
Arts Management Associates

Ms Serene Choo

Senior Executive,
Changi General Hospital

Ms Suree Rohan

Principal,
Rohan Mah & Partners LLP

Mr T. Thambyrajah

Chief Operating Officer,
SINDA

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Director,
Bokley Pte Ltd

Mr Tan Khye Suan

Executive Director,
Epworth Community Services

Ms Tan Mei Hui

Subject Head,
Arts,
Ministry of Education

Ms Vijaya d/o Nadesan

Principal,
Apsaras Arts Ltd

Mr Zhuo Zihao

Freelance Dance Artist

IMDA Advisory Committees

Broadcast, Publications and Arts Appeal Committee (BPAAC)

CHAIRPERSON

Mr Choo Thiam Siew

Retiree
Served till 30 April 2022

Dr Suzaina Kadir

Vice-Dean,
Academic Affairs,
Lee Kuan Yew School of Public Policy,
National University of Singapore
Chairperson as of 1 May 2022

VICE-CHAIRPERSON

Dr Hadijah Binte Rahmat

Head,
Asian Languages and Cultures Academic
Group, National Institute of Education,
Nanyang Technological University
Served till 30 April 2022

Mr Low Sze Wee

Chief Executive Officer,
Singapore Chinese Cultural Centre
Vice-Chairperson as of 1 May 2022

MEMBERS

Dr Adele Tan

Senior Curator,
National Gallery Singapore

Mr Adrian Quek

Senior Manager
The Rink@Jcube

Mr Albert Tan

Senior Manager,
National Centre of Excellence for
Workplace Learning

Ms Annette Chong

Homemaker

Mr Bala Reddy

Senior District Judge,
Civil Justice Division,
State Courts

Dr Carol Balhetchet

Clinical Psychologist and Hypnotherapist,
Dr Carol & Associates

Mr Jim Lim Teck Hwee

Director and Principal Trainer,
REAL Academy

Mr Liew Chin Choy

Director,
Board of Directors,
Apsaras Arts Ltd.

Ms Mona Lim

Specialist Teacher (Music),
St. Joseph's Institution

Dr Muhammad Haniff Bin Hassan

Fellow,
S. Rajaratnam School of International Studies,
Nanyang Technological University
Served till 30 April 2022

Mdm Ruby Tan Yok Ching

Director,
Pedagogical Excellence,
Academy of Singapore Teachers,
Ministry of Education

Ms Sabrina Goh

Associate Lecturer,
Ngee Ann Polytechnic

Mdm Som Binte Mohamed Said

Founder / Artistic Director and Choreographer,
Sri Warisan Som Said Performing Arts Ltd

Dr Tan Hun Tong

Professor,
Director,
Centre for Accounting and Auditing Research,
Nanyang Technological University

Mr Tan Yap Kin

Group Academic Director,
Elitek12 Education Group
Served till 30 April 2022

IMDA Advisory Committees

Data Protection Advisory Committee (DPAC)

EXECUTIVE CHAIRPERSON

Mr Leong Keng Thai

Senior Advisor,
Infocomm Media Development Authority

MEMBERS

Mr Chak Kong Soon

Managing Partner,
Stream Global Pte Ltd

Ms Charmaine Leung

Managing Director,
Community Chest;
Group Director,
Fund-raising & Engagement,
National Council of Social Service

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Co-Founder and Chief Executive Officer,
UCARE AI

Mr Colin Lim

Chief Information Officer,
MOH Holdings Pte Ltd

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Senior Vice President,
Assistant General Counsel,
Mastercard Asia Pacific HQ

Mr Gaurav Keerthi

Deputy Chief Executive,
Cyber Security Agency

Ms K. Thanaletchimi

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Healthcare Services Employees' Union

Mr Kurt Wee

President,
Association of Small & Medium Enterprises

Mr Lance Little

Managing Director,
Region Asia Pacific,
Roche Diagnostics Asia Pacific Pte Ltd
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Civil Division;
Dean, AGC Academy,
Attorney-General Chambers

Mr Lu Cheng Yang

Secretary-General,
Singapore Chinese Chamber of Commerce
and Industry

Mr Mohamed Nasser Ismail

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Equity Capital Market,
Singapore Exchange

Mr Patrick Tay

Assistant Secretary-General,
National Trades Union Congress

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Prof Simon Chesterman

Dean,
Faculty of Law,
National University of Singapore

Ms Tammie Tham

Group Chief Executive Officer,
Ensign InfoSecurity

Ms Weng Wanyi

Director,
Government Data Office (GDO),
Smart Nation & Digital Government Office

IMDA Advisory Committees

Films Appeal Committee (FAC)

CHAIRPERSON

Mr Tan Boon Huat

Retired,
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University Librarian, NUS Libraries

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Changi Travel Exchange Pte Ltd.

Mr Ravindran Nagalingam

Chief Operating Officer,
SINDA

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Republic Polytechnic

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Humanities, Social Sciences & Research
Communication, President's Office;
Professor,
Wee Kim Wee School of Communication
and Information;
Nanyang Technological University

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SG Her Empowerment Limited

Mdm Zulaiha Binte Yusuf

Deputy Chief Executive Officer,
Yayasan MENDAKI

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Great Expectations Communications
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Associate Lecturer,
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Singapore Armed Forces,
Ministry of Defence;
Psychiatry Resident,
National Healthcare Group

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Lawyer and Founder,
Marcus Phuah & Co.

MEMBERS

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Managing Director,
Consignclear LLC

Mr Adrien Quek, PBM

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Department of Educational Development,
Singapore Polytechnic

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The Thinkers Learning Centre

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ADVISOR

Mr Yap Chee Yuen

Group Chief Information Officer,
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AI Innovation,
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Blockchain and Distributed Ledger Technologies

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IT Standards Committee (ITSC) cont'd

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Head Cybersecurity Certification Centre,
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Mr Walter Lim

Director and Editor,
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Association of Muslim Professionals

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Political Films Consultative Committee (PFCC)

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Stamp Advisory Committee (SAC)

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DBS Bank Ltd

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Financial Services & Philately,
Singapore Post Limited



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Vanguard Healthcare

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Mr Charles Maideen

Academic

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Co-Founder,
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Mr Eric Khoo

Director,
Zhao Wei Films

Mr Freddie Yeo

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Infinite Frameworks

Ms Han Minli

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Filmgarde

Mr K. Rajagopal

Director

Ms Karen Chan

Executive Director,
Asian Film Archive

Ms Lim Ting Li

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Mocha Chai Laboratories

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Entertainment Industry Hong Kong
Trade Development Council

Mr Sebastian Tan

Group Managing Director,
Shooting Gallery Asia

Ms Yvonne Tham

Chief Executive Officer,
The Esplanade Co Ltd

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Telecommunications Standards Advisory Committee (TSAC)

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Infocomm Media Development Agency

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Head, Communications and Networks
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Institute for Infocomm Research

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Digital Products and Technology,
Mediacorp Pte Ltd

FOCUS AREA 6 CHAIRPERSON

Dr Oh Ser Wah

Founder,
Whizpace Pte Ltd

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Digital Applied Research and Technology

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Mr Denis Seek

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Mr Kok Yixiong

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Mr Lim Wee Seng

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Power System Operation Division,
Energy Market Authority

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Mobile Network Strategy and Access
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Singapore Telecommunications Ltd

Mr Marcus Tan Cheng Lin

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Institute for Infocomm Research

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Information Services Group,
Housing Development Board

Mr Peter Quek

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Cybersecurity & Digital Services,
Land Transport Authority

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IMDA Advisory Committees

Telecommunications Standards Advisory Committee (TSAC) cont'd

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Exchange Master Planning and Fibre COE,
Singapore Telecommunications Ltd

ASSOCIATE MEMBERS

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Mr Paul Jesemann

Regional Chief Technical Officer,
Mavenir Systems

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Mr Arthur Gerona

Chief Technical Officer,
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Singapore Pte Ltd

Dr Periklis Akritidis

Regional Chief Technical Officer APAC,
Mobileum Pte Ltd

Mr Thomas Chan

Solution Architect,
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Mr Mahesh Basavaraju

Market Segment Manager,
Wireless Communications,
Rohde & Schwarz Regional Headquarters
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Head,
Mobile Solutions,
MyRepublic Limited

Mr Yao Shih Jih

Executive Vice President;
Head, Smart Utilities and Infrastructure,
Urban Solutions,
ST Engineering Electronics

ALTERNATE ASSOCIATE MEMBERS

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Operations,
Mobileum Pte Ltd

Mr Qiwei

Head,
Marketing and Solution Sales Dept,
Huawei International Pte Ltd

Financial Statements



**Info-communications Media Development Authority
and its subsidiaries**

Consolidated Annual Report
Year ended 31 March 2022

Statement by Info-communications Media Development Authority

In our opinion:

- (a) the accompanying consolidated financial statements of Info-communications Media Development Authority (the "Authority") and its subsidiaries (the "Group") as set out on pages 7 to 82 are drawn up in accordance with the provisions of the Public Sector (Governance) Act 2018, (the "Public Sector (Governance) Act"), the Info-communications Media Development Authority Act 2016 (the "IMDA 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 Authority as at 31 March 2022 and the results and changes in equity of the Group and the Authority, and cash flows of the Group for the year then ended on that date;
- (b) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the financial year have been in accordance with the provisions of the Public Sector (Governance) Act, the IMDA Act and the requirements of any other written law applicable to moneys of or managed by the Authority; and
- (c) proper accounting and other records have been kept, including records of all assets of the Group whether purchased, donated or otherwise.

The Board of the Info-communications Media Development Authority has, on the date of this statement, authorised these financial statements for issue.

On behalf of the Board



Chan Yeng Kit
Chairman



Lew Chuen Hong
Chief Executive

15 July 2022

INDEPENDENT AUDITOR'S REPORT TO THE MEMBER OF INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY

Report on the Audit of the Financial Statements

Our Opinion

In our opinion, the accompanying consolidated financial statements of Info-communications Media Development Authority (the "Authority") and its subsidiaries (the "Group") and the statement of financial position, statement of comprehensive income 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 Info-communications Media Development Authority Act 2016 (the "IMDA 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 Authority as at 31 March 2022 and the results and changes in equity of the Group and the Authority and cash flows of the Group for the financial year ended on that date.

What we have audited

The financial statements of the Group and the Authority comprise:

- the statements of financial position of the Group and the Authority as at 31 March 2022;
- the statements of comprehensive income of the Group and the Authority for the financial year ended 31 March 2022;
- the statements of changes in equity of the Group and the Authority for the financial year then ended;
- the consolidated statement of cash flows of the Group for the financial year then ended; and
- the notes to the financial statements, including a summary of significant accounting policies.

Basis for Opinion

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

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

Independence

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

INDEPENDENT AUDITOR'S REPORT TO THE MEMBER OF INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY (continued)

Other Information

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

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

In connection with our audit of the financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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

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

Management is responsible for the preparation and fair presentation of financial statements in accordance with the provisions of the Public Sector (Governance) Act, the IMDA 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 misstatement, 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 are responsible for 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.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBER OF INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY (continued)

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

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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

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

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.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBER OF INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY (continued)

Report on Other Legal and Regulatory Requirements

Opinion

In our opinion:

- (a) 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 IMDA Act and the requirements of any other written law applicable to moneys of or managed by the Authority; and
- (b) proper accounting and other records have been kept, including records of all assets of the Authority and of the subsidiaries incorporated in Singapore of which we are the auditors 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.

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 IMDA 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 IMDA Act and the requirements of any other written law applicable to moneys of or managed by the Authority.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBER OF INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY (continued)

Auditor's Responsibilities for the Compliance Audit (continued)

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 accounting and internal control system, non-compliances may nevertheless occur and not be detected.



PricewaterhouseCoopers LLP
Public Accountants and Chartered Accountants
Singapore,

15 July 2022

Statements of financial position
As at 31 March 2022

	Note	Group		Authority	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Assets					
Property, plant and equipment	4	105,425	98,039	80,211	94,778
Intangible assets	5	4,227	4,888	4,101	4,709
Investment in associate	6	750	–	750	–
Investments in subsidiaries	7	–	–	22,313	22,313
Deferred scholarship expenditure		555	199	555	199
Financial assets at FVTPL, including derivatives	9	787,647	782,423	787,647	782,423
Non-current assets		898,604	885,549	895,577	904,422
Financial assets at FVTPL, including derivatives	9	207,779	167,267	207,779	167,267
Trade and other receivables	10	11,980	42,887	11,606	44,029
Contract assets	19	1,362	4,171	1,362	4,171
Amount due from subsidiaries		–	–	511	1,265
Cash and cash equivalents	8	736,472	708,923	687,866	668,535
Deferred scholarship expenditure		537	101	537	101
Current assets		958,130	923,349	909,661	885,368
Total assets		1,856,734	1,808,898	1,805,238	1,789,790
Equity					
Share capital	11	55,100	26,194	55,100	26,194
Capital account	12	635,645	635,645	622,452	622,452
Accumulated surplus		12,830	83,464	4,695	74,179
Total equity		703,575	745,303	682,247	722,825
Liabilities					
Contract liabilities	19	682,013	605,035	681,503	604,478
Lease liabilities	15	59,900	72,825	59,900	72,718
Amount due to a subsidiary		–	–	12,240	12,000
Deferred capital grants	17	18,278	6,139	3,540	6,139
Provision for pension and medical benefits	13	22,537	26,815	22,537	26,815
Provision for ex-gratia		172	168	172	168
Provision for reinstatement of property, plant and equipment		10,092	6,395	4,886	6,395
Deferred tax liabilities		14	38	–	–
Non-current liabilities		793,006	717,415	784,778	728,713
Trade and other payables, including derivatives	14	124,416	105,833	110,815	102,506
Contract liabilities	19	138,784	141,211	134,739	137,444
Lease liabilities	15	13,063	12,008	12,956	11,688
Grants received in advance	16	80,178	83,187	76,423	83,187
Provision for pension and medical benefits	13	3,280	3,427	3,280	3,427
Income tax payable		432	514	–	–
Current liabilities		360,153	346,180	338,213	338,252
Total liabilities		1,153,159	1,063,595	1,122,991	1,066,965
Total equity and liabilities		1,856,734	1,808,898	1,805,238	1,789,790
Net assets of trust and agency funds	18	214,992	175,094	214,992	175,094

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

Statements of comprehensive income
Year ended 31 March 2022

	Note	Group 2022			Group 2021		
		General Fund \$'000	Restricted Funds \$'000	Total \$'000	General Fund \$'000	Restricted Funds \$'000	Total \$'000
Income							
Revenue	19	169,464	82	169,546	170,740	–	170,740
Interest income		2,165	-	2,165	5,692	–	5,692
Investment income		45,215	-	45,215	48,238	–	48,238
Other income	20	1,098	2,703	3,801	1,705	–	1,705
		<u>217,942</u>	<u>2,785</u>	<u>220,727</u>	<u>226,375</u>	<u>–</u>	<u>226,375</u>
Net fair value gain/(loss)	23	(52,979)	-	(52,979)	61,422	–	61,422
Expenses							
Employee compensation	21	(128,987)	(26,743)	(155,730)	(124,199)	(31,084)	(155,283)
Professional and consultancy fees		(17,820)	(6,731)	(24,551)	(22,929)	(5,208)	(28,137)
Outreach, events and publicity expenses		(10,689)	(9,995)	(20,684)	(6,647)	(8,759)	(15,406)
IT expenses		(37,683)	(3,448)	(41,131)	(33,635)	(1,182)	(34,817)
Irrecoverable Goods and Services Tax		(5,317)	(2,265)	(7,582)	(5,631)	(1,616)	(7,247)
General and administrative expenses		(5,453)	(687)	(6,140)	(6,899)	(658)	(7,557)
Rental expenses		(204)	6	(198)	(199)	(5)	(204)
Lease interest expense	15	(1,369)	(59)	(1,428)	(1,512)	(20)	(1,532)
Staff training		(1,946)	(16)	(1,962)	(1,730)	(10)	(1,740)
Depreciation and amortisation expenses	4, 5	(15,494)	(6,669)	(22,163)	(17,037)	(3,665)	(20,702)
Other expenses		(2,270)	(19,305)	(21,575)	(4,634)	(7,975)	(12,609)
Total operating expenditure		<u>(227,232)</u>	<u>(75,912)</u>	<u>(303,144)</u>	<u>(225,052)</u>	<u>(60,182)</u>	<u>(285,234)</u>
Development expenses	22	(30,816)	(34,527)	(65,343)	(56,901)	(33,800)	(90,701)
Surplus/(deficit) before Government grants and share of loss of associate		<u>(93,085)</u>	<u>(107,654)</u>	<u>(200,739)</u>	<u>5,844</u>	<u>(93,982)</u>	<u>(88,138)</u>

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

Statements of comprehensive income (continued)
Year ended 31 March 2022

	Note	Group 2022			Group 2021		
		General Fund \$'000	Restricted Funds \$'000	Total \$'000	General Fund \$'000	Restricted Funds \$'000	Total \$'000
Surplus/(deficit) before Government grants and share of loss of associate (continued)		(93,085)	(107,654)	(200,739)	5,844	(93,982)	(88,138)
Government grants							
Government grants	16	51,522	100,360	151,882	64,332	90,421	154,753
Deferred capital grants amortised	17	442	2,706	3,148	1,919	3,561	5,480
Total Government grants		51,964	103,066	155,030	66,251	93,982	160,233
Share of loss for associate		(1,770)	–	(1,770)	–	–	–
Net surplus/(deficit) before contribution to consolidated fund and tax		(42,891)	(4,588)	(47,479)	72,095	–	72,095
Tax expenses	25	(412)	–	(412)	(514)	–	(514)
Net surplus/(deficit) for the year		(43,303)	(4,588)	(47,891)	71,581	–	71,581
Other comprehensive income/(loss)							
<i>Items that will not be reclassified to income or expenditure</i>							
Actuarial gain/(loss) recognised on provision for pension and medical benefits	13	1,555	–	1,555	287	–	287
Total other comprehensive income/(loss)		1,555	–	1,555	287	–	287
Total comprehensive income/(loss)		(41,748)	(4,588)	(46,336)	71,868	–	71,868

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

Statements of comprehensive income (continued)
Year ended 31 March 2022

	Note	Authority 2022			Authority 2021		
		General Fund \$'000	Restricted Funds \$'000	Total \$'000	General Fund \$'000	Restricted Funds \$'000	Total \$'000
Income							
Revenue	19	163,944	-	163,944	165,430	-	165,430
Interest income		2,113	-	2,113	5,547	-	5,547
Investment income		45,215	-	45,215	48,238	-	48,238
Other income	20	2,983	2,703	5,686	3,460	-	3,460
		<u>214,255</u>	<u>2,703</u>	<u>216,958</u>	<u>222,675</u>	<u>-</u>	<u>222,675</u>
Net fair value gain/(loss)	23	(52,979)	-	(52,979)	61,422	-	61,422
Expenses							
Employee compensation	21	(124,869)	(23,637)	(148,506)	(121,089)	(28,924)	(150,013)
Professional and consultancy fees		(20,213)	(6,558)	(26,771)	(25,156)	(5,137)	(30,293)
Outreach, events and publicity expenses		(9,806)	(9,995)	(19,801)	(6,628)	(8,609)	(15,237)
IT expenses		(36,607)	(3,322)	(39,929)	(32,644)	(969)	(33,613)
Irrecoverable Goods and Services Tax		(5,317)	(2,265)	(7,582)	(5,628)	(1,616)	(7,244)
General and administrative expenses		(5,202)	(641)	(5,843)	(6,707)	(646)	(7,353)
Rental expenses		(204)	6	(198)	(199)	(5)	(204)
Lease interest expense	15	(1,369)	(4)	(1,373)	(1,512)	(19)	(1,531)
Staff training		(1,941)	(9)	(1,950)	(1,702)	(9)	(1,711)
Depreciation and amortisation expenses	4, 5	(15,356)	(4,416)	(19,772)	(16,918)	(3,532)	(20,450)
Other expenses		(2,444)	(19,255)	(21,699)	(4,869)	(7,952)	(12,821)
Total operating expenditure		<u>(223,328)</u>	<u>(70,096)</u>	<u>(293,424)</u>	<u>(223,052)</u>	<u>(57,418)</u>	<u>(280,470)</u>
Development expenses	22	(31,010)	(56,571)	(87,581)	(60,503)	(36,564)	(97,067)
Surplus/(deficit) before Government grants and share of loss of associate		<u>(93,062)</u>	<u>(123,964)</u>	<u>(217,026)</u>	<u>542</u>	<u>(93,982)</u>	<u>(93,440)</u>

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

Statements of comprehensive income (continued)
Year ended 31 March 2022

	Note	Authority 2022			Authority 2021		
		General Fund \$'000	Restricted Funds \$'000	Total \$'000	General Fund \$'000	Restricted Funds \$'000	Total \$'000
Surplus/(deficit) before Government grants and share of loss of associate (continued)		(93,062)	(123,964)	(217,026)	542	(93,982)	(93,440)
Government grants							
Government grants	16	51,522	118,648	170,170	64,332	90,421	154,753
Deferred capital grants amortised	17	442	1,443	1,885	1,919	3,561	5,480
Total Government grants		51,964	120,091	172,055	66,251	93,982	160,233
Share of loss for associate		(1,770)	–	(1,770)	–	–	–
Net surplus/(deficit) for the year		(42,868)	(3,873)	(46,741)	66,793	–	66,793
Other comprehensive income/(loss)							
<i>Items that will not be reclassified to income or expenditure</i>							
Actuarial gain/(loss) recognised on provision for pension and medical benefits	13	1,555	–	1,555	287	–	287
Total other comprehensive income/(loss)		1,555	–	1,555	287	–	287
Total comprehensive income/(loss)		(41,313)	(3,873)	(45,186)	67,080	–	67,080

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

Statements of changes in equity
Year ended 31 March 2022

	Note	Share capital \$'000	Capital account \$'000	<----- Accumulated surplus ----->			Total \$'000
				General Fund \$'000	Restricted Funds \$'000	Subtotal \$'000	
Group							
At 1 April 2020		7,521	635,645	11,596	–	11,596	654,762
Net surplus for the year		–	–	71,581	–	71,581	71,581
Other comprehensive income							
Actuarial gain recognised on provision for pension and medical benefits	13	–	–	287	–	287	287
Total other comprehensive income		–	–	287	–	287	287
Total comprehensive income		–	–	71,868	–	71,868	71,868
Transaction with owner, recognised directly in equity							
Contribution by and (distribution to) owner							
Issuance of shares	11	18,673	–	–	–	–	18,673
Total contribution by and (distribution to) owner		18,673	–	–	–	–	18,673
At 31 March 2021		26,194	635,645	83,464	–	83,464	745,303

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

Statements of changes in equity (continued)
Year ended 31 March 2022

	Note	Share capital \$'000	Capital account \$'000	<----- Accumulated surplus ----->			Total \$'000
				General Fund \$'000	Restricted Funds \$'000	Subtotal \$'000	
Group							
At 1 April 2021		26,194	635,645	83,464	–	83,464	745,303
Net deficit for the year		–	–	(43,303)	(4,588)	(47,891)	(47,891)
Other comprehensive income							
Actuarial gain recognised on provision for pension and medical benefits	13	–	–	1,555	–	1,555	1,555
Total other comprehensive income		–	–	1,555	–	1,555	1,555
Total comprehensive income		–	–	(41,748)	(4,588)	(46,336)	(46,336)
Transaction with owner, recognised directly in equity							
Contribution by and (distribution to) owner							
Issuance of shares	11	28,906	–	–	–	–	28,906
Dividends paid (\$1 per share)		–	–	(24,298)	–	(24,298)	(24,298)
Total contribution by and (distribution to) owner		28,906	–	(24,298)	–	(24,298)	4,608
At 31 March 2022		55,100	635,645	17,418	(4,588)	12,830	703,575

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

Statements of changes in equity
Year ended 31 March 2022

	Note	Share capital \$'000	Capital account \$'000	<----- Accumulated surplus ----->			Total \$'000
				General Fund \$'000	Restricted Funds \$'000	Subtotal \$'000	
Authority							
At 1 April 2020		7,521	622,452	7,099	–	7,099	637,072
Net surplus for the year		–	–	66,793	–	66,793	66,793
Other comprehensive income							
Actuarial gain recognised on provision for pension and medical benefits	13	–	–	287	–	287	287
Total other comprehensive income		–	–	287	–	287	287
Total comprehensive income		–	–	67,080	–	67,080	67,080
Transaction with owner, recognised directly in equity							
Contribution by and (distribution to) owner							
Issuance of shares	11	18,673	–	–	–	–	18,673
Total contribution by and (distribution to) owner		18,673	–	–	–	–	18,673
At 31 March 2021		26,194	622,452	74,179	–	74,179	722,825

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

Statements of changes in equity (continued)
Year ended 31 March 2022

	Note	Share capital \$'000	Capital account \$'000	<----- Accumulated surplus ----->			Total \$'000
				General Fund \$'000	Restricted Funds \$'000	Subtotal \$'000	
Authority							
At 1 April 2021		26,194	622,452	74,179	–	74,179	722,825
Net deficit for the year		–	–	(42,868)	(3,873)	(46,741)	(46,741)
Other comprehensive income							
Actuarial gain recognised on provision for pension and medical benefits	13	–	–	1,555	–	1,555	1,555
Total other comprehensive income		–	–	1,555	–	1,555	1,555
Total comprehensive income		–	–	(41,313)	(3,873)	(45,186)	(45,186)
Transaction with owner, recognised directly in equity							
Contribution by and (distribution to) owner							
Issuance of shares	11	28,906	–	–	–	–	28,906
Dividends paid (\$1 per share)		–	–	(24,298)	–	(24,298)	(24,298)
Total contribution by and (distribution to) owner		28,906	–	(24,298)	–	(24,298)	4,608
At 31 March 2022		55,100	622,452	8,568	(3,873)	4,695	682,247

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

Consolidated statement of cash flows
Year ended 31 March 2022

	Note	Group	
		2022 \$'000	2021 \$'000
Cash flows from operating activities			
Deficit before Government grants and share of loss of associate		(200,739)	(88,138)
Adjustments for:			
Depreciation and amortisation expenses	4, 5	22,163	20,702
Net fair value loss/(gain)	23	52,979	(61,422)
Transfer to development expenses		(4,539)	
Interest income		(2,165)	(5,692)
Loss on disposal of property, plant and equipment and intangible assets		2,440	29
Amortisation of deferred scholarship expenditure to the income or expenditure		785	755
Interest expense on lease liabilities	15	1,428	1,532
		<u>(127,648)</u>	<u>(132,234)</u>
Changes in:			
- deferred scholarship expenditure		(1,577)	(75)
- trade and other receivables		30,907	(408)
- contract assets		2,809	(779)
- trade and other payables		18,918	19,851
- contract liabilities		74,551	67,661
- provision for pension and medical benefits		324	350
- write-back of ex-gratia provision		4	10
Cash used in operations		<u>(1,712)</u>	<u>(45,624)</u>
Tax paid		(518)	(537)
Payment of pension and medical benefits	13	(3,194)	(3,361)
Net cash used in operating activities		<u>(5,424)</u>	<u>(49,522)</u>
Cash flows from investing activities			
Purchase of property, plant and equipment		(23,570)	(3,515)
Purchase of intangible assets	5	(4,061)	(5,317)
Investment in associate		(2,520)	-
Purchase of investment funds	9	(1,002,437)	(955,575)
Proceeds from divestment of investment funds	9	903,387	990,008
Interest received		2,165	12,026
Net cash (used in)/provided by investing activities		<u>(127,036)</u>	<u>37,627</u>
Cash flows from financing activities			
Government grants received	16	168,699	211,424
Issuance of shares	11	28,906	18,673
Payment of dividend		(24,298)	-
Principal payment of lease liabilities	15	(11,870)	(12,000)
Interest paid	15	(1,428)	(1,532)
Net cash provided by financing activities		<u>160,009</u>	<u>216,565</u>
Net increase in cash and cash equivalents		27,549	204,670
Cash and cash equivalents at beginning of the year		<u>708,923</u>	<u>504,253</u>
Cash and cash equivalents at end of the year	8	<u>736,472</u>	<u>708,923</u>

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

Notes to the financial statements

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

The financial statements were authorised for issue by the Board on 04 August 2022.

1 Domicile and activities

Info-communications Media Development Authority (the “Authority”), a statutory board under the Ministry of Communications and Information (“MCI”), was established in The Republic of Singapore under the Info-communications Media Development Authority Act 2016 (the “IMDA Act”) on 1 October 2016.

The establishment of the Authority was by way of restructuring of Media Development Authority of Singapore (“MDA”) and Info-communications Development Authority of Singapore (“IDA”) to form Info-communications Media Development Authority (“IMDA”) and Government Technology Agency (“GovTech”).

Pursuant to Part 9 of the IMDA Act, all the business and undertakings and all rights and obligations of MDA and business and undertakings and rights and obligations of certain divisions of IDA were transferred and vested in the Authority on 1 October 2016. On the date of establishment of the Authority, the assets, liabilities and share capital of MDA and the assets and liabilities of certain divisions of IDA were transferred to the Authority at their book value, with a corresponding amount credited to capital account.

As a statutory board, the Authority is subjected to the control of its supervisory Ministry, MCI, and is required to follow the policies and instructions issued from time to time by MCI and other government ministries and departments such as the Ministry of Finance (“MOF”).

The registered office and principal place of operations of the Authority is located at 10 Pasir Panjang Road, #03-01 Mapletree Business City, Singapore 117438.

The Authority has the following functions:

- (a) to promote the efficiency, competitiveness (including internationally) and development of the information, communications and media industry in Singapore;
- (b) to promote and maintain fair and efficient market conduct and effective competition between persons engaged in commercial activities in connection with media services or telecommunication systems and services in Singapore or, in the absence of a competitive market, to prevent the misuse of monopoly or market power;
- (c) to regulate the provision and use of telecommunication systems, and equipment and software in connection with such systems, and telecommunication services, in Singapore, including by –

- (i) ensuring that telecommunication services are reasonably accessible to all persons in Singapore and are supplied as efficiently and economically as practicable and at performance standards that reasonably meet the social, industrial and commercial needs of Singapore; and
 - (ii) determining or approving prices, tariffs and charges for the provision of telecommunication systems and services;
- (d) to regulate the provision and use of media services, and equipment and facilities used in connection with media services, in Singapore, including by —
- (i) facilitating the provision of an adequate range of media services that serves the interests of the general public;
 - (ii) ensuring that media services are provided at a high standard in all respects, particularly in respect of the quality, balance and range of subject matter of their content; and
 - (iii) ensuring that the content of media services is not against public interest, public order or national harmony, and does not offend against good taste or decency;
- (e) to promote the use of the Internet and electronic commerce in Singapore and to establish regulatory frameworks for that purpose;
- (f) to regulate and manage domain names of Internet websites in Singapore;
- (g) to promote the use of information and communications technology in Singapore and, where necessary, to collaborate with the Government Technology Agency (established by section 3 of the Government Technology Agency Act 2016) in respect of that;
- (h) to promote, where suitable, self-regulation in the information, communications and media industry in Singapore;
- (i) to advise the Government on matters relating to the information, communications and media industry and the functions of the Authority;
- (j) to represent Singapore and advance Singapore's interest internationally in matters relating to the information, communications and media industry;
- (k) to promote research and development into technological matters relating to the information, communications and media industry;
- (l) to promote and set standards for the training, and the upgrading of the competencies, of persons for the purposes of the information, communications and media industry in Singapore;
- (m) to provide consultancy services in or outside Singapore relating to the information, communications and media industry;

- (n) to operate the nationwide parcel locker network via Pick Network Pte Ltd, a fully-owned subsidiary of IMDA;
- (o) to perform such other functions as may be conferred on the Authority by any other act, including being designated as the Personal Data Protection Commission responsible for the administration of the Personal Data Protection Act 2012, being designated as the Postal Authority responsible for the administration of the Postal Services Act, as well as being the Competent Authority appointed to give effect to the instructions of the Minister for Communications and Information and any Minister where prescribed by the Protection from Online Falsehoods and Manipulation Act 2019.

2 Basis of preparation

2.1 Statements of compliance

The financial statements have been prepared in accordance with the provisions of the Public Sector (Governance) 2018 (the Public Sector (Governance) Act), the Info-communication Media Development Authority Act (the IMDA Act) and Statutory Board Financial Reporting Standards ("SB-FRS"), including Interpretations of SB-FRS ("INT SB-FRS") and SB-FRS Guidance Notes as promulgated by the Accountant-General.

2.2 Basis of measurement

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

2.3 Functional and presentation currency

These financial statements are presented in Singapore dollars, which is the Authority's functional currency. All financial information presented in Singapore dollars have been rounded to the nearest thousand, unless otherwise stated.

2.4 Use of estimates and judgements

The preparation of the financial statements in conformity with SB-FRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. 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.

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements relate to the classification of financial instruments, and are disclosed in Note 3.3.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are as follows:

Provision for pension and medical benefits

Provision for pension and medical benefits is estimated by management based on the most recent valuation by professional actuaries. Changes to assumptions and estimates used in the valuation would result in changes to the provision for pension and medical benefits amounts estimated.

Valuation of investments

The determination of fair value for financial assets for which there are no observable market price requires the use of valuation techniques as described in Note 29. For financial instruments that trade infrequently and have little price transparency, fair value is less objective and requires varying degrees of judgement depending on liquidity, concentration, uncertainty of market factors, pricing assumptions and other risks affecting the specific instrument.

Deferred benefits on contribution to Consolidated Fund

Deferred benefits have not been recognised on unutilised deficits carried forward as the Authority is expected to continue to be in operating deficit, excluding unrealised fair value gains or losses from its financial assets held at fair value through profit or loss ("FVTPL"). Management believes that the probability of utilising the carried forward deficits is dependent on market performance and does not expect significant gains from financial assets held at FVTPL to fully offset the unutilised deficits. Accordingly, the Authority has not recognised any deferred benefits for contribution to Consolidated Fund.

Licence fees

Licence fees are billed in advance based on a percentage of the licencees' total qualifying income or annual gross turnover. The licence fees are recognised evenly over the licence period and are subsequently adjusted based on the latest available information. Changes to the estimates used in the determination of licence fee would result in changes to the licence fee revenue recognised for the financial year.

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

3.1 Basis of consolidation

Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

The accounting policies of the subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

Subsidiaries in the separate financial statements

Investments in subsidiaries are stated in the Authority's statement of financial position at cost less accumulated impairment loss.

3.2 Foreign currency

Foreign currency transactions

Transactions in foreign currencies are translated to the functional currencies of the Authority and its subsidiaries at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the year, adjusted for effective interest and payments during the year, and the amortised cost in foreign currency translated at the exchange rate at the end of the year.

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated to the functional currency at the exchange rate at the date that the fair value was determined. Non-monetary items in a foreign currency that are measured in terms of historical cost are translated using the exchange rate at the date of the transaction. Foreign currency differences arising on translation are recognised in income or expenditure.

3.3 Financial instruments

(i) Recognition and initial measurement

Non-derivative financial assets and financial liabilities

Trade receivables are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(ii) Classification and subsequent measurement

Non-derivative financial assets

On initial recognition, a financial asset is classified as measured at amortised cost or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

Financial assets at amortised cost

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

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

Financial assets at FVTPL

All financial assets not classified as measured at amortised cost are measured at FVTPL. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at fair value through other comprehensive income (“FVOCI”) as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets: Business model assessment

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the assets are managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management’s strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realising cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Group’s management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Financial assets that are held-for-trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

Non-derivative financial assets: Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows that it would not meet this condition. In making this assessment, the Group considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represent as unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a significant discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

Non-derivative financial assets: Subsequent measurement and gains and losses

Financial assets at FVTPL

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in income or expenditure.

Financial assets at amortised cost

These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in income or expenditure.

Non-derivative financial liabilities: Classification, subsequent measurement and gains and losses

The Group's other non-derivative financial liabilities are classified as other financial liabilities. Other financial liabilities are initially measured at fair value less directly attributable transaction costs. They are subsequently measured at amortised cost using the effective interest rate method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. These financial liabilities comprised trade and other payables and amount due to a subsidiary.

(iii) Derecognition

Financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

Financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in income or expenditure.

(iv) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously

(v) Cash and cash equivalents

Cash and cash equivalents comprise cash and bank balances and are used by the Group in the management of its short-term commitments.

(vi) Derivative financial instruments

The Group holds derivative financial instruments for efficient portfolio management of the investment portfolio. Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset and certain criteria are met.

Derivatives are initially measured at fair value and any directly attributable transaction costs are recognised in income or expenditure as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are generally recognised in income or expenditure.

(vii) Share capital

Ordinary shares issued in accordance with FCM 26/2008 - Capital Management Framework for Statutory Boards, are classified as equity. The shares issued are held by the Minister for Finance, incorporated by the Minister for Finance (Establishment) Act.

3.4 Property, plant and equipment

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes:

- the cost of materials and direct labour;
- any other costs directly attributable to bringing the assets to a working condition for their intended use;
- when the Group has an obligation to remove the asset or restore the site, an estimate of the costs of dismantling and removing the items and restoring the site on which they are located.

The gain or loss on disposal of an item of property, plant and equipment, calculated as the difference between the net proceeds from disposal and the carrying amount of the item, is recognised in income or expenditure.

The cost of replacing a component of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the component will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced component is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in income or expenditure as incurred.

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, and is recognised from the date that the property, plant and equipment are installed and are ready for use. Assets under construction are not depreciated.

The estimated useful lives are as follows:

Lockers	7 years
Vehicles	5 years or over the lease term (Note 3.9)
Furniture, fittings and equipment	5 years
Computers	3 years
Leasehold improvements	Over the lease term
Office premises	Over the lease term (Note 3.9)
Building	50 years

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

3.5 Intangible assets

Computer systems including software development costs are capitalised on the basis of the costs incurred to bring to use or develop the specific system. Direct expenditures including employee costs, which enhances or extends the performance of computer or application system beyond its specifications and which can be reliably measured, is added to the original cost of the system. Costs associated with maintaining the computer system are recognised as expenses when incurred.

Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour, overhead costs that are directly attributable to preparing the asset for its intended use. Other development expenditure is recognised in profit or loss as incurred.

Computer systems are measured at cost less accumulated amortisation and accumulated impairment losses. These costs less residual values, are amortised and recognised to income or expenditure using the straight-line method over their estimated useful lives of 3 years or licence period, whichever shorter.

In respect of internally constructed intangible assets, amortisation is recognised from the date that the asset is completed and ready for use. Systems under development are not amortised.

The amortisation period and amortisation method of intangible assets are reviewed at the end of each reporting period.

3.6 Impairment

(i) Non-derivative financial assets

Non-derivative financial assets and contract assets

The Group recognises loss allowances for expected credit losses (ECLs) on financial assets measured at amortised costs and contract assets (as defined in SB-FRS 115).

Loss allowances of the Group are measured on either of the following bases:

- 12-month ECLs: these are ECLs that result from default events that are possible within the 12 months after the reporting date (or for a shorter period if the expected life of the instrument is less than 12 months); or
- Lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial instrument or contract asset.

Simplified approach

The Group applies the simplified approach to provide for ECLs for all trade receivables and contract assets. The simplified approach requires the loss allowance to be measured at an amount equal to lifetime ECLs.

General approach

The Group applies the general approach to provide for ECLs on all other financial instruments. Under the general approach, the loss allowance is measured at an amount equal to 12-month ECLs at initial recognition.

At each reporting date, the Group assesses whether the credit risk of a financial instrument has increased significantly since initial recognition. When credit risk has increased significantly since initial recognition, loss allowance is measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and includes forward-looking information.

If credit risk has not increased significantly since initial recognition or if the credit quality of the financial instruments improves such that there is no longer a significant increase in credit risk since initial recognition, loss allowance is measured at an amount equal to 12-month ECLs.

The Group considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset remains outstanding for more than a reasonable range of past due days, taking into consideration historical payment track record as well as general industry trend.

The Group considers a contract asset to be in default when the customer is unlikely to pay its contractual obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

Measurement of ECLs

ECLs are probability-weighted estimates of credit losses. Credit losses are measured at the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than a reasonable range of past due days;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

Presentation of allowance for ECLs in the statement of financial position

Loss allowances for financial assets measured at amortised cost and contract assets are deducted from the gross carrying amount of these assets.

Write-off

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

(ii) 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. For intangible assets that are not yet available for use, the recoverable amount is estimated each year at the same time. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit ("CGU") exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. 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 that are largely independent of the cash inflows of other assets or CGUs.

Impairment losses are recognised in income or expenditure. Impairment losses recognised in respect of CGUs are allocated to reduce the carrying amounts of the assets in the CGU on a *pro rata* basis.

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.

3.7 Deferred scholarship expenditure

Expenditure incurred in providing scholarships is capitalised and stated at cost less accumulated amortisation. Amortisation is calculated on a straight-line basis to write off the cost over the period of the scholarship bond from 1 to 6 years commencing from the year that the scholars commence employment with the Authority.

3.8 Employee benefits

(i) Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an employee benefit expense in income or expenditure in the periods during which related services are rendered by employees.

Contributions on the employees' salaries are made to the Central Provident Fund ("CPF") as required by law. CPF contributions are recognised as employee compensation expenses in the period when the employees rendered their services.

(ii) Defined benefit plans

The Group operates a defined benefit pension plan that provides certain post-employment pension benefits for eligible employees.

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the future benefit that the employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of any plan assets is deducted. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the period to the net defined benefit liability (asset). The discount rate is the yield of the Singapore Government bond rate that has maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid.

The calculation is performed annually by a qualified actuary using the projected unit credit method to determine the present value of defined benefit obligations and the current service cost. Under the method, a "projected accrued benefit" is calculated for each benefit. For all active members of the scheme, the "projected accrued benefit" is based on the scheme's accrual formula and upon service as of the valuation date, but using the employee's scheme salary, projected to the age at which the benefit is expected to be payable. For inactive members, it is the total benefit. The defined benefit obligations are the discounted present value of the "projected accrued benefits". The service cost is the corresponding value of benefits earned by active members over the year as a result of one more year of service.

Re-measurements from defined benefit plans comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Group recognises them immediately in other comprehensive income and all expenses related to defined benefit plans in employee compensation in income or expenditure.

When the benefits of a plan are changed, or when a plan is curtailed, the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised immediately in income or expenditure when the plan amendment or curtailment occurs.

The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs. The gain or loss on settlement is the difference between the present value of the defined benefit obligation being settled as determined on the date of settlement and the settlement price, including any plan assets transferred and any payments made directly by the Group in connection with the settlement.

(iii) Termination benefits

Termination benefits are recognised as an expense when the Group is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognised as an expense if the Group has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably. If benefits are payable more than 12 months after the reporting date, then they are discounted to their present value.

(iv) 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 under short-term cash bonus 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.

(v) Employee leave entitlements

Employee entitlements to annual leave are recognised when they accrue to employees. Accrual is made for the unconsumed leave as a result of services rendered by employees up to the reporting date.

(vi) Provision for ex-gratia payments

This amount is provided for payments to be made to former Singapore Broadcasting Corporation ("SBC") staff transferred from MDA to the Group. The provision is computed based on the guidelines contained in the Ministry of Finance (Revenue) Circular No. 4/94 dated 10 August 1994.

3.9 Leases

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in SB-FRS 116.

As a lessee

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices. However, for the leases of office premises the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments; and
- lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in income or expenditure if the carrying amount of the right-of-use asset has been reduced to zero.

Short-term leases and leases of low-value assets

The Group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, including IT equipment. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

3.10 Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows that reflects current market assessments of the time value of money and the risks specific to the liability.

3.11 Dividends

Dividends payable to the Minister for Finance, incorporated by the Minister for Finance (Incorporation) Act, the ultimate shareholder, are recognised when the Authority approves the dividends for payment.

3.12 Trust and agency funds

Moneys received from the Government of Singapore and other organisations where the Authority is not the owner and beneficiary, are accounted for as trust and agency funds.

The total net assets and liabilities of the trust and agency funds of the Authority are shown as a separate line in the statements of financial position. Trust and agency funds are accounted for on a cash basis. Under the cash basis, receipts are accounted for and taken up on the fund accounts when received, instead of when earned. Disbursements made are accounted for when paid, instead of when incurred.

3.13 Restricted funds

These are funds set aside for specific purposes and for which separate disclosure are made as these funds are material and subject to restrictions on the ability of the Authority to distribute or otherwise apply its funds. The treatment is in accordance with SB-FRS Guidance Note 1. Restricted funds are accounted for on an accrual basis.

3.14 Revenue recognition

Revenue are recognised over time following the timing of satisfaction of the performance obligation ("PO"). The following table provides information about the nature and timing of the satisfaction of performance obligations in contracts with customers, including significant payment terms, and the related revenue recognition policies of significant revenue streams.

Licence fees

Nature of services	The Group grants licences to telecommunications and media companies based on their nature of operations. The licences vary based on licence types, periods and the licensee’s total qualifying income or annual gross turnover.
When revenue is recognised	<p>The Group has assessed that these contracts qualify for over time revenue recognition as the Group generally has enforceable rights to payment for licences granted till date. The revenue recognised is assessed by reference to the contract term elapsed in proportion to the full licence period granted.</p> <p>Revenue is recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.</p> <p>Subsequent adjustments are made based on the latest available information on the licensee’s total qualifying income or annual gross turnover as mandated by the licence conditions.</p> <p>Additional fees earned relating to subsequent adjustments which are not yet billed are reflected under contract assets in the statement of financial position. The contract assets are transferred to trade receivables when the Group invoices the licensees.</p>
Significant payment terms	<p>Licence fees are billed in accordance with the licensee’s financial year prior to the commencement of the licence.</p> <p>Fees received in advance are reflected under contract liabilities in the statement of financial position. Fees that are expected to be recognised as revenue in the next 12 months will be classified as contract liabilities under current liabilities.</p>

Frequency fees

Nature of services	The Group allocates and assigns frequencies to telecommunication companies. The fees are fixed by the Group and allocated to the telecommunication companies through different methods, including auctions and assignments.
When revenue is recognised	The Group has assessed that these contracts qualify for over time revenue recognition as the Group generally has enforceable rights to payment for frequencies granted till date. The revenue recognised is assessed by reference to the contract term elapsed in proportion to the full frequency period granted.
Significant payment terms	Frequency fees are billed in advance during the allocation and assignment period. Fees received in advance are reflected under contract liabilities in the statement of financial position. Fees that are to be recognised as revenue in the next 12 months will be classified as contract liabilities under current liabilities.

Service fees

Nature of services	The Group earns revenue from providing services, including registration and renewal of domain names.
When revenue is recognised	Service fees revenue are recognised over the validity period, net of incentive rebates.
Significant payment terms	Fees are billed at the start of the registration and renewal process and are payable immediately. Registration and renewal fees received in advance are reflected under contract liabilities in the statement of financial position. Fees that are to be recognised as revenue in the next 12 months will be classified as contract liabilities under current liabilities.

Parcel locker fees

Nature of services	The Group earns revenue from the provision of parcel locker storage and services.
When revenue is recognised	Booking fees are recognised over time when the services are rendered, net of incentive rebate.
Significant payment terms	Fees are billed once every month. A contract asset is recognised for the revenue recognised which are not yet billed.

3.15 Interest income and expense

Interest income or expense is recognised using the effective interest method.

The 'effective interest rate' is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- the gross carrying amount of the financial asset; or
- the amortised cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

3.16 Government grants

Government grants and contributions from other organisations are recognised initially as Grants received in advance at their fair value where there is reasonable assurance that they will be received and the Authority will comply with the conditions associated with the grants and contributions.

Government grants received to meet the Authority's operating expenditure are recognised in the income or expenditure as income on a systematic basis in the same financial periods in which the expenses are recognised.

Government grants utilised for the purchase or the construction of depreciable tangible and intangible assets are recorded in the deferred capital grants account. The deferred capital grants are amortised to income or expenditure over the period necessary to match the annual depreciation and amortisation charge of these assets purchased with the related grants. On disposal of these assets, the balance of the related deferred capital grant is recognised in income or expenditure to match the net book value of the assets disposed.

3.17 Investment income

Investment income comprises mainly dividend income from quoted investments which are classified as financial assets at FVTPL. Dividend income is recognised in income or expenditure on the date which the Group's right to receive payment is established.

3.18 Contribution to Consolidated Fund

The Authority is required to make contributions to the Consolidated Fund in accordance with the Statutory Corporations (Contributions to Consolidation Fund) Act, Chapter 319A (Revised Edition 2004). The provision is based on guidelines specified by the Ministry of Finance. It is computed based on a percentage pegged at the prevailing corporate tax rate for the period of assessment on the net surplus of the Authority and after deducting prior year's accumulated deficits in accordance with FCM 5/2005 – Framework for Contribution to Consolidated Fund by Statutory boards. Contributions are provided for on an accrual basis.

The Authority is allowed to carry forward its deficits to offset its future surplus. The deficits have no expiry date.

The benefits associated with the deficits are recognised as deferred benefits on Contribution to Consolidated Fund to the extent that realisation of the related benefits through future surplus is probable.

3.19 Investment in Associates

Associates are entities over which the Authority has significant influence, but not control, generally accompanied by a shareholding giving rise to voting rights of 20% and above.

Investment in associates is accounted for using the equity method of accounting less impairment losses, if any in the Authority's financial statements.

(i) *Acquisition*

Investment in associates is initially recognised at cost. The cost of an acquisition is measured at the fair value of the assets given, equity instruments issued or liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the acquisition. Goodwill on associates represents the excess of the cost of acquisition of the associates over the Authority's share of the fair value of the identifiable net assets of the associates and is included in the carrying amount of the investment.

(ii) *Equity method of accounting*

Under the equity method of accounting, the investment is initially recognised at cost and adjusted thereafter to recognise Authority's share of its associates' post-acquisition profits or losses of the investee in profit or loss and its share of movements in other comprehensive income of the investee's other comprehensive income. Dividends received or receivable from the associates are recognised as a reduction of the carrying amount of the investment. When the Authority's share of losses in an associates equals to or exceeds its interest in the associates, the Authority does not recognise further losses, unless it has legal or constructive obligations to make, or has made, payments on behalf of the associates. If the associates subsequently reports profits, the Authority resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised.

Unrealised gains on transactions between the Group and Authority and its associates are eliminated to the extent of the Group and Authority's interest in the associates. Unrealised losses are also eliminated unless the transactions provide evidence of impairment of the assets transferred. The accounting policies of associates are changed where necessary to ensure consistency with the accounting policies adopted by the Authority.

(iii) *Disposals*

Investment in associates is derecognised when the Authority loses significant influence. If the retained equity interest in the former associates is a financial asset, the retained equity interest is measured at fair value. The difference between the carrying amount of the retained interest at the date when significant influence is lost, and its fair value and any proceeds on partial disposal, is recognised in profit or loss.

3.20 New standards and interpretations

On 1 April 2021, the Group has adopted the new or amended SB-FRS and Interpretations of SB-FRS ("INT SB-FRS") that are mandatory for application for the financial year. Changes to the Group's accounting policies have been made as required, in accordance with the transitional provisions in the respective SB-FRS and INT SB-FRS.

The adoption of these new or amended SB-FRS and INT SB-FRS did not result in substantial changes to the Group's accounting policies and had no material effect on the amounts reported for the current or prior financial years.

New standards and interpretations not yet adopted

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after 1 April 2022, and earlier application is permitted; however, the Group has not early applied the new standards and interpretations in preparing these statements.

The new standards are not expected to have a significant impact on the Group's consolidated financial statements.

4 Property, plant and equipment

Group	Vehicles \$'000	Furniture, fittings and equipment \$'000	Lockers \$'000	Computers \$'000	Leasehold improvements \$'000	Building \$'000	Office premises \$'000	Assets under construction \$'000	Total \$'000
Cost									
At 1 April 2020	1,937	7,258	–	4,797	11,695	160	90,813	189	116,849
Additions	366	–	–	313	34	–	21,979	3,168	25,860
Disposals	–	(36)	–	(241)	–	–	–	–	(277)
At 31 March 2021	2,303	7,222	–	4,869	11,729	160	112,792	3,357	142,432
At 1 April 2021	2,303	7,222	–	4,869	11,729	160	112,792	3,357	142,432
Additions	–	181	24,145	831	396	–	1,232	93	26,878
Transfer	–	–	2,753	–	389	–	–	(3,142)	–
Disposals	(1,282)	(225)	–	(97)	–	–	(1,550)*	(25)	(3,179)
At 31 March 2022	1,021	7,178	26,898	5,603	12,514	160	112,474	283	166,131

* This relates to a downward revision in the provision for reinstatement during the financial year ended 31 Mar 2022.

Group	Vehicles \$'000	Furniture, fittings and equipment \$'000	Lockers \$'000	Computers \$'000	Leasehold improvements \$'000	Building \$'000	Office premises \$'000	Assets under construction \$'000	Total \$'000
Accumulated depreciation									
At 1 April 2020	1,165	5,569	–	4,162	4,407	160	12,972	–	28,435
Depreciation for the year	412	568	–	645	898	–	13,710	–	16,233
Disposals	–	(34)	–	(241)	–	–	–	–	(275)
At 31 March 2021	1,577	6,103	–	4,566	5,305	160	26,682	–	44,393
At 1 April 2021	1,577	6,103	–	4,566	5,305	160	26,682	–	44,393
Depreciation for the year	222	447	1,916	244	1,092	–	13,568	–	17,489
Disposals	(854)	(225)	–	(97)	–	–	–	–	(1,176)
At 31 March 2022	945	6,325	1,916	4,713	6,397	160	40,250	–	60,706
Carrying amounts									
At 31 March 2021	726	1,119	–	303	6,424	–	86,110	3,357	98,039
At 31 March 2022	76	853	24,982	890	6,117	–	72,224	283	105,425

Property, plant and equipment includes right-of-use assets of \$72,224,000 (2021: \$86,664,000) related to office premises and vehicles.

Authority	Vehicles \$'000	Furniture, fittings and equipment \$'000	Computers \$'000	Leasehold improvements \$'000	Building \$'000	Office premises \$'000	Assets under construction \$'000	Total \$'000
Cost								
At 1 April 2020	1,937	7,258	4,118	11,695	160	90,813	189	116,170
Additions	366	–	254	34	–	21,420	414	22,488
Disposals	–	(36)	(241)	–	–	–	–	(277)
At 31 March 2021	<u>2,303</u>	<u>7,222</u>	<u>4,131</u>	<u>11,729</u>	<u>160</u>	<u>112,233</u>	<u>603</u>	<u>138,381</u>
At 1 April 2021	2,303	7,222	4,131	11,729	160	112,233	603	138,381
Additions	–	181	817	396	–	1,232	–	2,626
Transfer	–	–	–	389	–	–	(389)	–
Disposals	(1,282)	(225)	(97)	–	–	(1,550)*	(25)	(3,179)
At 31 March 2022	<u>1,021</u>	<u>7,178</u>	<u>4,851</u>	<u>12,514</u>	<u>160</u>	<u>111,915</u>	<u>189</u>	<u>137,828</u>

* This relates to a downward revision in the provision for reinstatement during the financial year ended 31 Mar 2022.

Authority	Vehicles \$'000	Furniture, fittings and equipment \$'000	Computers \$'000	Leasehold improvements \$'000	Building \$'000	Office premises \$'000	Assets under Construction \$'000	Total \$'000
Accumulated depreciation								
At 1 April 2020	1,165	5,569	3,548	4,407	160	12,972	–	27,821
Depreciation for the year	412	568	601	898	–	13,578	–	16,057
Disposals	–	(34)	(241)	–	–	–	–	(275)
At 31 March 2021	<u>1,577</u>	<u>6,103</u>	<u>3,908</u>	<u>5,305</u>	<u>160</u>	<u>26,550</u>	<u>–</u>	<u>43,603</u>
At 1 April 2021	1,577	6,103	3,908	5,305	160	26,550	–	43,603
Depreciation for the year	222	447	181	1,092	–	13,248	–	15,190
Disposals	(854)	(225)	(97)	–	–	–	–	(1,176)
At 31 March 2022	<u>945</u>	<u>6,325</u>	<u>3,992</u>	<u>6,397</u>	<u>160</u>	<u>39,798</u>	<u>–</u>	<u>57,617</u>
Carrying amounts								
At 31 March 2021	<u>726</u>	<u>1,119</u>	<u>223</u>	<u>6,424</u>	<u>–</u>	<u>85,683</u>	<u>603</u>	<u>94,778</u>
At 31 March 2022	<u>76</u>	<u>853</u>	<u>859</u>	<u>6,117</u>	<u>–</u>	<u>72,117</u>	<u>189</u>	<u>80,211</u>

Property, plant and equipment includes right-of-use assets of \$72,117,000 (2021: \$86,237,000) related to office premises and vehicles.

5 Intangible assets

Group	Computer systems \$'000	Systems under development \$'000	Total \$'000
Cost			
At 1 April 2020	31,768	151	31,919
Additions	5,239	78	5,317
Reclassification	14	(14)	–
Disposal	(5,003)	–	(5,003)
At 31 March 2021	<u>32,018</u>	<u>215</u>	<u>32,233</u>
At 1 April 2021	32,018	215	32,233
Additions	3,409	652	4,061
Reclassification	23	(23)	–
Disposal	(4,039)	–	(4,039)
At 31 March 2022	<u>31,411</u>	<u>844</u>	<u>32,255</u>
Accumulated amortisation			
At 1 April 2020	27,852	–	27,852
Amortisation for the year	4,469	–	4,469
Disposal	(4,976)	–	(4,976)
At 31 March 2021	<u>27,345</u>	<u>–</u>	<u>27,345</u>
At 1 April 2021	27,345	–	27,345
Amortisation for the year	4,674	–	4,674
Disposal	(3,991)	–	(3,991)
At 31 March 2022	<u>28,028</u>	<u>–</u>	<u>28,028</u>
Carrying amounts			
At 31 March 2021	<u>4,673</u>	<u>215</u>	<u>4,888</u>
At 31 March 2022	<u>3,383</u>	<u>844</u>	<u>4,227</u>

	Computer systems \$'000	Systems under development \$'000	Total \$'000
Authority			
Cost			
At 1 April 2020	29,251	137	29,388
Additions	5,092	78	5,170
Disposal	(4,184)	–	(4,184)
At 31 March 2021	<u>30,159</u>	<u>215</u>	<u>30,374</u>
At 1 April 2021	30,159	215	30,374
Additions	3,370	652	4,022
Reclassification	23	(23)	–
Disposal	(4,039)	–	(4,039)
At 31 March 2022	<u>29,513</u>	<u>844</u>	<u>30,357</u>
Accumulated amortisation			
At 1 April 2020	25,429	–	25,429
Amortisation for the year	4,393	–	4,393
Disposal	(4,157)	–	(4,157)
At 31 March 2021	<u>25,665</u>	<u>–</u>	<u>25,665</u>
At 1 April 2021	25,665	–	25,665
Amortisation for the year	4,582	–	4,582
Disposal	(3,991)	–	(3,991)
At 31 March 2022	<u>26,256</u>	<u>–</u>	<u>26,256</u>
Carrying amounts			
At 31 March 2021	<u>4,494</u>	<u>215</u>	<u>4,709</u>
At 31 March 2022	<u>3,257</u>	<u>844</u>	<u>4,101</u>

6 Investment in associate

In September 2021, the Authority injected \$2,520,000 into a newly incorporated company, Singapore Trade Data Exchange Services Pte Ltd, in consideration for a 40% equity interest in the company.

Details of the associate are as follows:

<u>Name of Entity</u>	<u>Place of business / country of incorporation</u>	<u>% of ownership interest</u>	
		<u>31 March</u>	
		<u>2022</u>	<u>2021</u>
		%	%
Singapore Trade Data Exchange Services Pte Ltd	Singapore	40	–

Singapore Trade Data Exchange Services Pte Ltd is a market development company, to drive business development and adoption of SGTraDex, including new Use Case development and additional value-added services and platforms. SGTraDex aims to address inefficiencies in the supply chain ecosystem by sharing key event, cargo, and document data in a trusted and secure manner.

Summarised financial information for associate

Summarised balance sheet

	Singapore Trade Data Exchange Services Pte Ltd	
	31 March	
	2022	2021
	\$'000	\$'000
Current assets	5,389	–
Current liabilities	3,517	–
Non-current assets	2	–
Non-current liabilities	–	–

Summarised statement of comprehensive income

Singapore Trade Data Exchange Services Pte Ltd		
For the year ended 31 March		
	2022	2021
	\$'000	\$'000
Revenue	327	–
Net profit/(loss)	(4,426)	–
Total comprehensive loss	(4,426)	–

The information above reflects the amounts presented in the financial statements of the associate (and not the Authority's share of those amounts).

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented, to the carrying amount of the Authority's interest in the associate, is as follows:

Singapore Trade Data Exchange Services Pte Ltd		
31 March		
	2022	2021
	\$'000	\$'000
Net assets	1,874	–
Authority's equity interest	40%	–
Authority's share of net assets	750	–
Carrying value	750	–

There are no contingent liabilities relating to the Authority's interest in the associate.

7 Investments in subsidiaries

	Authority	
	2022	2021
	\$'000	\$'000
Unquoted shares, at cost	22,313	22,313

Details of the subsidiaries are as follow:

Name of subsidiary	Principal activity	Country of incorporation and operation	Effective equity interest held by the Authority	
			2022	2021
			%	%
Singapore Network Information Centre (SGNIC) Pte Ltd ¹	Registry of internet domain names	Singapore	100	100
Pick Network Pte Ltd ¹	Deploy, own and operate the Nationwide Parcel Locker Network	Singapore	100	100
Singapore Trade Data Exchange (SGTRADEX) Technologies Pte Ltd ¹	Operate and maintain the technology utility that facilitates trusted and secured sharing of data between ecosystem partners	Singapore	100	-

¹ Audited by PricewaterhouseCoopers LLP, Singapore

8 Cash and cash equivalents

	Note	Group		Authority	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
General Fund		638,024	624,132	617,884	603,654
Restricted Funds	26	98,448	84,791	69,982	64,881
		<u>736,472</u>	<u>708,923</u>	<u>687,866</u>	<u>668,535</u>
Cash held with custodian bank		66,795	124,274	66,795	124,274
Cash held with Accountant- General's Department ("AGD")		884,669	759,743	836,063	719,355
Cash held with AGD managed by the Authority on behalf of other ministries	18	(214,992)	(175,094)	(214,992)	(175,094)
		<u>736,472</u>	<u>708,923</u>	<u>687,866</u>	<u>668,535</u>

Cash held with custodian bank is available for use by the Group in the management of its short-term commitments.

The Group participates in the AGD's Centralised Liquidity Management Scheme ("CLM") whereby the Group's cash is pooled together and managed centrally by AGD, a related party. Individual accounts are still maintained for daily transaction purpose and funds are transferred from cash held with AGD and is used by the Group in the management of its short-term commitments. AGD pays interest on the Group's cash balances participating in AGD's CLM. The average effective interest rate during the year was 0.30% (2021: 0.79%).

Cash and cash equivalents of the Group include an amount of \$25,817,000 (2021: \$30,242,000) earmarked for payment of pension and medical benefits to eligible employees as disclosed in Note 13.

9 Financial assets at FVTPL

	Note	Group and Authority	
		2022 \$'000	2021 \$'000
At 1 April		949,690	934,036
Addition		1,002,437	955,575
Divestment		(903,387)	(990,008)
Net fair value gain/(loss) recognised in income or expenditure	23	(53,314)	50,087
At 31 March		<u>995,426</u>	<u>949,690</u>
Financial assets at FVTPL			
- Quoted investment funds		950,293	925,426
- Unquoted investment funds		33,149	18,081
- Forward exchange contracts and futures	29	11,984	6,183
		<u>995,426</u>	<u>949,690</u>
Non-current		787,647	782,423
Current		<u>207,779</u>	<u>167,267</u>
		<u>995,426</u>	<u>949,690</u>

10 Trade and other receivables

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Trade receivables	3,921	16,675	3,839	16,675
Less: allowance for impairment of trade receivables	(244)	(305)	(244)	(305)
	<u>3,677</u>	<u>16,370</u>	<u>3,595</u>	<u>16,370</u>
Other receivables				
- due from MCI	1,298	15,564	1,298	15,564
- advance due from a subsidiary	–	–	–	1,468
- sundry debtors	3,087	6,587	3,087	6,582
- interest receivable from AGD	1,329	1,328	1,296	1,294
Advances and deposits	<u>1,948</u>	<u>1,986</u>	<u>1,948</u>	<u>1,986</u>
	11,339	41,835	11,224	43,264
Prepayments	641	1,052	382	765
	<u>11,980</u>	<u>42,887</u>	<u>11,606</u>	<u>44,029</u>

Unless otherwise agreed or stated in agreements or licence conditions, IMDA allows a standard 30 days credit terms. Late payment fees are charged at prevailing MOF late payment interest rate. Other receivables amounts are unsecured. There is no allowance for impairment arising from these outstanding balances.

11 Share capital

	Group and Authority			
	2022		2021	
	\$'000	Number of shares ('000)	\$'000	Number of shares ('000)
At 1 April	26,194	26,194	7,521	7,521
Issuance of shares	28,906	28,906	18,673	18,673
At 31 March	55,100	55,100	26,194	26,194

During the year, the Authority issued additional 28,905,532 (2021: 18,672,700) shares at \$1 per share.

All shares issued are held by the Minister for Finance, incorporated by the Minister for Finance (Incorporation) Act. The holder of these shares is entitled to receive dividends as and when declared by the Authority. All shares issued carry no voting rights and have no par value.

12 Capital account

The capital account comprises the capitalisation of net assets transferred from the MDA and certain divisions of IDA on 1 October 2016, the date of establishment of the Group and the Authority upon the restructuring of MDA and IDA to form IMDA and GovTech.

13 Provision for pension and medical benefits

The provision for pension and medical benefits relates to benefits payable upon retirement of employees from the former Singapore Broadcasting Authority who were transferred to MDA and employees from the former Telecommunications Authority of Singapore who were transferred to IDA. These employees were transferred to the Authority from MDA and IDA upon the establishment of the Authority on 1 October 2016. The Group no longer provides such benefits to its active employees.

The Group contributes to the following post-employment defined benefit plans:

- Pension benefits – The plan provides pension benefits to pensionable employees with at least 10 years of pensionable services.
- Post-retirement benefits – The plan provides its eligible employees and their dependents with post-retirement medical benefits.

The employee benefits plans expose the Group to actuarial risks, such as longevity risk and interest rate risk. As at 31 March 2022, the Group expects to pay \$25,817,000 (2021: \$30,242,000) in contributions to its defined benefit plans.

- (a) The amount recognised in the statements of financial position is determined as follows:

	Group and Authority	
	2022	2021
	\$'000	\$'000
Present value of obligations	25,817	30,242
Comprising:		
- Current	3,280	3,427
- Non-current	22,537	26,815
	25,817	30,242

- (b) The amounts recognised in income or expenditure as employee compensation are as follows:

	Group and Authority	
	2022	2021
	\$'000	\$'000
Interest cost	324	350

- (c) The amounts recognised in other comprehensive income are as follows:

	Group and Authority	
	2022	2021
	\$'000	\$'000
Actuarial gain/(loss) arising from:		
Financial assumptions	1,911	317
Experience adjustment	(356)	(30)
	1,555	287

- (d) Movement in the fair value of pension and medical benefits is as follows:

	Group and Authority	
	2022	2021
	\$'000	\$'000
At 1 April	30,242	33,540
Interest cost	324	350
Actuarial gain recognised in other comprehensive income	(1,555)	(287)
Benefits paid	(3,194)	(3,361)
At 31 March	25,817	30,242

The principal assumptions used in determining the Group and Authority's pension obligations are:

	Group and Authority	
	2022	2021
Discount rates		
- Pension	2.30%	1.12%
- Medical Benefits	2.30%	1.22%

The discount rates used are based on the interpolated yield rate of Singapore Government Bond with durations relating to pension and medical benefits of 5.8 years and 6.2 years respectively (2021: 6.3 years and 6.9 years), which are the weighted durations of future benefit payments. The Singapore Mortality Table S2004-08M/F was used for purpose of the latest valuation of pension liabilities.

Sensitivity analysis

The calculation of the defined benefit obligation is sensitive to the assumptions set out above. The following table summarises how the impact on the defined benefit obligation at the end of the reporting period would have increased/(decreased) as a result of changes in the assumptions by 0.5 percent, holding all other assumptions constant.

	Defined benefit obligation	
	0.5 percent increase	0.5 percent decrease
	\$'000	\$'000
Group and Authority		
31 March 2022		
Discount rates		
- Pension	(627)	659
- Medical Benefits	(90)	95
31 March 2021		
Discount rates		
- Pension	(814)	861
- Medical Benefits	(107)	113

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation to the sensitivity of the assumptions shown.

14 Trade and other payables

	Note	Group		Authority	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Trade and other payables		25,202	20,327	18,636	19,286
Accrued operating expenses		20,645	19,282	14,003	18,534
Accrued development expenses		21,193	15,237	21,193	15,237
Accrued payroll related costs		48,020	46,067	47,627	44,529
Advance due to MCI		4,963	-	4,963	-
Deposits received		421	614	421	614
Forward exchange contracts and futures	29	3,972	4,306	3,972	4,306
		<u>124,416</u>	<u>105,833</u>	<u>110,815</u>	<u>102,506</u>

15 Lease liabilities

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Lease liabilities				
- Non-current	59,900	72,825	59,900	72,718
- Current	13,063	12,008	12,956	11,688
	<u>72,963</u>	<u>84,833</u>	<u>72,856</u>	<u>84,406</u>

Leases as lessee

The Group leases office premises and vehicles, with some leases having an option to renew the lease at the end of their lease term.

The Group leases IT equipment with contract terms of one to three years or less. These leases are short-term and/or leases of low-value items. The Group has elected not to recognise right-of-use assets and lease liabilities for these leases.

Information about leases for which the Group is a lessee is presented below.

Right-of-use assets

	Vehicles		Office premises		Total	
	2022	2021	2022	2021	2022	2021
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Group						
Balance at 1 April	554	495	86,110	77,841	86,664	78,336
Depreciation charge for the year	(128)	(307)	(13,568)	(13,710)	(13,696)	(14,017)
Additions to right-of-use assets	–	366	1,232	21,979	1,232	22,345
Disposal of right-of-use assets	(426)	–	(1,550)	–	(1,976)	–
Balance at 31 March	–	554	72,224	86,110	72,224	86,664

	Vehicles		Office premises		Total	
	2022	2021	2022	2021	2022	2021
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Authority						
Balance at 1 April	554	495	85,683	77,841	86,237	78,336
Depreciation charge for the year	(128)	(307)	(13,248)	(13,578)	(13,376)	(13,885)
Additions to right-of-use assets	–	366	1,232	21,420	1,232	21,786
Disposal of right-of-use assets	(426)	–	(1,550)	–	(1,976)	–
Balance at 31 March	–	554	72,117	85,683	72,117	86,237

Amounts recognised in profit or loss

	Group	
	2022 \$'000	2021 \$'000
Interest on lease liabilities	1,428	1,532
Expenses relating to short-term leases	199	6
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	450	99
	<u>450</u>	<u>99</u>
	Authority	
	2022 \$'000	2021 \$'000
Interest on lease liabilities	1,373	1,531
Expenses relating to short-term leases	199	6
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	450	99
	<u>450</u>	<u>99</u>

Reconciliation of movements of liabilities to cash flows arising from financing activities

<u>Group</u>	Lease liabilities	
	2022	2021
	\$'000	\$'000
Balance at 1 April	84,833	74,574
Changes from financing cash flows		
Interest paid	(1,428)	(1,532)
Principal payment of lease liabilities	(11,870)	(12,000)
Total changes from financing cash flows	(13,298)	(13,532)
Other changes		
New leases	-	22,259
Interest expense	1,428	1,532
Total liability-related other changes	1,428	23,791
Balance at 31 March	72,963	84,833
 <u>Authority</u>		
	Lease liabilities	
	2022	2021
	\$'000	\$'000
Balance at 1 April	84,406	74,574
Changes from financing cash flows		
Interest paid	(1,373)	(1,531)
Principal payment of lease liabilities	(11,550)	(12,000)
Total changes from financing cash flows	(12,923)	(13,531)
Other changes		
New leases	-	21,832
Interest expense	1,373	1,531
Total liability-related other changes	1,373	23,363
Balance at 31 March	72,856	84,406

16 Grants received in advance

	Note	General Fund		Restricted Funds		Total	
		2022	2021	2022	2021	2022	2021
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Group							
At 1 April		12,496	11,350	70,691	19,534	83,187	30,884
Received during the year		51,517	65,478	117,182	145,946	168,699	211,424
Transfer to development expenses		–	–	(1,085)	–	(1,085)	–
Transfer to deferred capital grants	17	(20)	–	(18,721)	(4,368)	(18,741)	(4,368)
Transfer to income or expenditure as government grants		(51,522)	(64,332)	(100,360)	(90,421)	(151,882)	(154,753)
At 31 March		12,471	12,496	67,707	70,691	80,178	83,187

	Note	General Fund		Restricted Funds		Total	
		2022	2021	2022	2021	2022	2021
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Authority							
At 1 April		12,496	11,350	70,691	19,534	83,187	30,884
Received during the year		51,517	65,478	115,714	145,946	167,231	211,424
Transfer to development expenses		–	–	(1,085)	–	(1,085)	–
Transfer to deferred capital grants	17	(20)	–	(2,720)	(4,368)	(2,740)	(4,368)
Transfer to income or expenditure as government grants		(51,522)	(64,332)	(118,648)	(90,421)	(170,170)	(154,753)
At 31 March		12,471	12,496	63,952	70,691	76,423	83,187

17 Deferred capital grants

	Note	General Fund		Restricted Funds		Total	
		2022	2021	2022	2021	2022	2021
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Group							
At 1 April		1,721	3,640	4,418	3,611	6,139	7,251
Transfer from grants received in advance	16	20	–	18,721	4,368	18,741	4,368
Transfer to development expenses		–	–	(3,454)	–	(3,454)	–
Transfer to income or expenditure as deferred capital grants amortised		(442)	(1,919)	(2,706)	(3,561)	(3,148)	(5,480)
At 31 March		1,299	1,721	16,979	4,418	18,278	6,139

	Note	General Fund		Restricted Funds		Total	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Authority							
At 1 April		1,721	3,640	4,418	3,611	6,139	7,251
Transfer from grants received in advance	16	20	–	2,720	4,368	2,740	4,368
Transfer to development expenses		–	–	(3,454)	–	(3,454)	–
Transfer to income or expenditure as deferred capital grants amortised		(442)	(1,919)	(1,443)	(3,561)	(1,885)	(5,480)
At 31 March		1,299	1,721	2,241	4,418	3,540	6,139

18 Trust and agency funds

Details of the trust and agency funds are set out below and have been prepared from the records of these funds and reflect only transactions handled by the Group:

The receipts and expenditure for the financial year are taken directly to the funds' accounts, and the net assets of these funds at the reporting date are as follows:

	Group and Authority	
	2022 \$'000	2021 \$'000
Public Service Broadcast ("PSB")	128,788	92,194
SMEs Go Digital	10,540	15,957
Smart Systems Strategic Research Programme ("SSSRP")	16,718	28,727
Others	58,946	38,216
	<u>214,992</u>	<u>175,094</u>

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	PSB		SMEs Go Digital		SSSRP		Others		Total	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Group & Authority										
At 1 April	92,194	28,273	15,957	15,642	28,727	3,680	38,216	10,003	175,094	57,598
Government grants received	454,360	368,592	2,763	14,459	9,452	75,644	88,813	103,202	555,388	561,897
Interest received	–	–	39	286	–	23	129	549	168	858
Less: Funds utilised in the year	(417,766)	(304,671)	(8,219)	(14,430)	(21,461)	(50,620)	(68,212)	(75,538)	(515,658)	(445,259)
At 31 March	128,788	92,194	10,540	15,957	16,718	28,727	58,946	38,216	214,992	175,094
Represented by:										
Cash and cash equivalents	128,788	92,194	10,540	15,957	16,718	28,727	58,946	38,216	214,992	175,094
Net Assets	128,788	92,194	10,540	15,957	16,718	28,727	58,946	38,216	214,992	175,094

Public Service Broadcast (“PSB”)

PSB supports programmes that promote social objectives and national harmony as well as serve the interests of television viewers. Hence, broadcasters in Singapore are required to carry these programmes as specified in their licences. Being commercially less viable, there is a need to support these programmes through public service programming funding.

SMEs Go Digital

SMEs Go Digital aims to help Small Medium Enterprises (“SMEs”) build stronger digital capabilities to seize the opportunities for growth in the digital economy.

Smart Systems Strategic Research Programme (“SSSRP”)

SSSRP is a programme under Research, Innovation and Enterprise 2022 that was established to build upon the Interactive Digital Media Strategic Research Programme by ensuring translation of research and development outputs and the development of info-communications and technology capabilities.

Others

The following trust and agency funds are included in “Others”:

- Green Data Centre programme is a programme initiated under the Energy National Innovation Challenge to improve data centre energy efficiency in the Singapore context through Research, Development and Demonstrations.
- Wireless@SG programme aims to catalyse the mobile broadband market and encourage a broadband lifestyle amongst citizens.
- Increase SME Productivity with Infocomm Adoption & Transformation programme aims to help SMEs use technology to enhance their productivity and growth by increasing the rate of adoption and raising SMEs’ info-communications capabilities.

19 Revenue

Disaggregation of revenue from contracts with customers

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Licence fees	77,239	85,856	77,239	85,856
Frequency fees	86,705	79,574	86,705	79,574
Service fees	5,520	5,310	–	–
Parcel Locker Fees	82	–	–	–
	169,546	170,740	163,944	165,430

Contract balances

The following table provides information about contract assets and contract liabilities recognised under SB-FRS 115.

	Group			Authority		
	31 March 2022 \$'000	31 March 2021 \$'000	1 April 2020 \$'000	31 March 2022 \$'000	31 March 2021 \$'000	1 April 2020 \$'000
Contract assets						
- Current	1,362	4,171	3,392	1,362	4,171	3,392
Contract liabilities						
- Non-current	682,013	605,035	563,236	681,503	604,478	562,795
- Current	138,784	141,211	115,349	134,739	137,444	112,283
	820,797	746,246	678,585	816,242	741,922	675,078

The contract assets primarily relate to the Group's rights to additional fees relating to subsequent adjustments which are not yet billed at the reporting date.

The contract liabilities primarily relate to advance consideration received from licencees. Fees that are expected to be recognised as revenue in the next 12 months will be classified as contract liabilities under current liabilities.

Significant changes in the contract assets and the contract liabilities balances during the year are as follows.

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Contract assets				
Contract assets reclassified to trade receivables	(4,171)	(3,392)	(4,171)	(3,392)
Changes in estimates for licence fees	1,362	4,171	1,362	4,171

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Contract liabilities				
Revenue recognised that was included in the contract liabilities balance at the beginning of the year	(175,206)	(115,349)	(163,642)	(112,283)

Trade receivables from contracts with customers

	Group			Authority		
	31 March 2022 \$'000	31 March 2021 \$'000	1 April 2020 \$'000	31 March 2022 \$'000	31 March 2021 \$'000	1 April 2020 \$'000
Trade receivables	3,921	16,675	5,000	3,839	16,675	5,000
Less: allowance for impairment of trade receivables	(244)	(305)	(47)	(244)	(305)	(47)
	3,677	16,370	4,953	3,595	16,370	4,953

20 Other income

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Donation	2,774	–	2,774	–
Dividend from a subsidiary	–	–	1,275	1,356
Recharges to subsidiaries	–	–	668	600
Rent concession (a)	–	244	–	244
Others	1,027	1,461	969	1,260
	3,801	1,705	5,686	3,460

(a) COVID-19 related rent concessions received from lessors to which the Group applied the practical expedient under amendments to SB-FRS 116.

21 Employee compensation

	Note	Group		Authority	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Wages and salaries		134,948	129,344	128,606	124,757
Employer's contribution to CPF		13,597	15,653	12,887	15,281
Interest cost for Pension and medical benefits	13	324	350	324	350
Other benefits		6,861	9,936	6,689	9,625
		<u>155,730</u>	<u>155,283</u>	<u>148,506</u>	<u>150,013</u>

22 Development expenses

Group	General Fund		Restricted Funds		Total	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Digital Economy Framework for Action	25,350	35,693	12,405	6,100	37,755	41,793
Digital Resilience Bonus	–	–	12,035	15,700	12,035	15,700
Hawkers Go Digital	–	–	1,687	11,504	1,687	11,504
NEU PC Plus 3.0	–	–	5,130	3,078	5,130	3,078
Seniors Go Digital	–	–	–	361	–	361
Fibre Ready Scheme	–	3,065	–	(3,065)	–	–
Digital Switchover	–	(20)	–	–	–	(20)
Others	5,466	18,163	3,270	122	8,736	18,285
	<u>30,816</u>	<u>56,901</u>	<u>34,527</u>	<u>33,800</u>	<u>65,343</u>	<u>90,701</u>
Authority						
Nationwide Parcel Locker Network	–	–	22,044	–	22,044	–
Digital Economy Framework for Action	25,567	39,302	12,405	6,941	37,972	46,243
Digital Resilience Bonus	–	–	12,035	15,700	12,035	15,700
Hawkers Go Digital	–	–	1,687	11,504	1,687	11,504
NEU PC Plus 3.0	–	–	5,130	3,078	5,130	3,078
Seniors Go Digital	–	–	–	361	–	361
Fibre Ready Scheme	–	3,065	–	(3,065)	–	–
Digital Switchover	–	(20)	–	–	–	(20)
Others	5,443	18,156	3,270	2,045	8,713	20,201
	<u>31,010</u>	<u>60,503</u>	<u>56,571</u>	<u>36,564</u>	<u>87,581</u>	<u>97,067</u>

Nationwide Parcel Locker Network

The Nationwide Parcel Locker Network is launched and operated by Pick Network Pte Ltd, a subsidiary. The Parcel Locker Network provides consumers with greater convenience, while enhancing the efficiency and sustainability of the urban logistics sector amidst the e-commerce boom.

Digital Economy Framework for Action (formerly Infocomm Media 2025)

The Digital Economy Framework for Action identifies and focuses on key priority areas to grow Singapore's digital economy and achieve Singapore's goal to be a leading digital economy which continually reinvents itself.

Digital Resilience Bonus ("DRB")

As part of the Fortitude Budget, the DRB is launched to uplift the digital capabilities of a broad base of enterprises in the Food Services and Retail sectors. Eligible Food Services and Retail enterprises that adopt pre-defined categories of digital solutions can receive one-time cash payouts of up to \$10,000.

Hawkers Go Digital

Hawkers Go Digital programme helps stallholders who have not begun using digital tools to get onboard with digital transformation through the adoption of e-Payment. This will build on existing efforts to drive adoption among stallholders at the NEA Hawker Centres/Wet Markets, HDB Coffeeshops and JTC industrial canteens.

NEU PC Plus 3.0 ("NPP")

NPP programme offers low-income households with students or persons with disabilities the opportunity to own a brand new computer at an affordable price. The programme has been enhanced to make digitalisation more accessible, to those who need it, such as low-income students who require digital access for home-based learning.

Seniors Go Digital

Seniors Go Digital programme equips our seniors with basic digital skills in communication, access to government digital services and make e-payment through the conduct of 1:1 training and learning journey at the SG Digital community hubs. It also addresses the affordability gap with its Mobile Access for Seniors (MAS) scheme.

Fibre Ready Scheme

Fibre Ready Scheme will subsidise building owners for a one-time installation of infrastructure that will provide open access to ultra-high speed fibre broadband to tenants in a non-residential building. The scheme ended in prior year.

Digital Switchover (“DSO”)

DSO is to implement nationwide switchover to Digital TV (“DTV”) and the switch-off of analogue TV signals to ensure that households are able to continue receiving the free-to-air TV channels through deployment of a nationwide DTV infrastructure, and creating public awareness and outreach campaign to drive DTV adoption. The scheme ended in prior year.

23 Net fair value gain/(loss)

	Note	Group and Authority	
		2022 \$’000	2021 \$’000
Net change in fair value of financial assets at FVTPL	9	(53,314)	50,087
Net change in fair value of forward exchange contracts and futures		335	11,335
Net fair value gain/(loss)		<u>(52,979)</u>	<u>61,422</u>

24 Provision for contribution to Consolidated Fund

The contribution to the Consolidated Fund is based on 17% of the net surplus of the Authority.

Following the restructuring of the MDA and IDA, the net deficit position of \$100,567,000 from MDA was brought forward to the Authority on 1 October 2016.

With net loss of \$46,741,000 (2021: surplus of \$66,793,000) recognised in the current year, the Authority has accumulated unrecognised deficits of \$74,061,000 (2021: \$27,320,000) at the reporting date which can be carried forward and used to offset against future net surplus before contributions are made to the Consolidated Fund.

25 Tax expenses

Tax expenses represents the current and deferred tax of the subsidiaries of the Authority under the local tax legislation. The Authority is exempted from income tax under the provisions of Income Tax Act (Chapter 134, Revised Edition 2014).

26 Net assets of Restricted Funds

	Note	Group		Authority	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Intangible assets		1,944	2,783	1,944	2,783
Property, plant and equipment		25,598	4,817	417	1,636
Non-current assets		27,542	7,600	2,361	4,419
Cash and cash equivalents	8	98,448	84,791	69,982	64,881
Trade and other receivables		619	9,155	429	10,496
Current assets		99,067	93,946	70,411	75,377
Total assets		126,609	101,546	72,772	79,796
Lease liabilities		115	257	115	150
Provision for reinstatement of property, plant and equipment		5,892	645	686	645
Non-current liabilities		6,007	902	801	795
Trade and other payables		21,897	5,747	9,651	2,924
Lease liabilities		107	1,288	–	968
Grants received in advance	16	67,707	70,691	63,952	70,691
Deferred capital grants	17	16,979	4,418	2,241	4,418
Current liabilities		106,690	82,144	75,844	79,001
Total liabilities		112,697	83,046	76,645	79,796
Net assets		13,912	18,500	(3,873)	–

27 Commitments

(a) Capital commitments of General and Restricted Funds

Capital expenditures contracted for at the reporting date but not recognised in the financial statements are as follows:

	Group		Authority	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Property, plant and equipment	3,832	14,382	3,699	1,747

(b) Restricted Funds

Commitments for Restricted Funds at reporting date are as follows:

	Group and Authority	
	2022	2021
	\$'000	\$'000
Amount committed but yet to be disbursed	420,833	228,501

The commitments will be funded by ministries and will be drawn down in accordance with the respective agreed schedules with the ministries. The Group regularly reviews its forecast submitted to the ministries to ensure adequate funds in meeting its commitments as and when it falls due under Restricted Funds.

28 Related party transactions

For the purpose of these financial statements, parties are considered to be related to the Authority if the Authority 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 Authority and the party are subject to common control or common significant influence. Related parties may be individuals or other entities.

(a) Significant related party transactions

Some of the Authority's transactions and arrangements are with related parties and the effect of these transactions and arrangements between the parties are reflected in these financial statements.

The amount due to a subsidiary relates to funds placed by the subsidiary with the Authority as the Authority manages the funds by investing in debt and equity securities on a pooled basis for up to 5 years. The outstanding balance due to a subsidiary is unsecured and bears interest at a fixed rate of 2% (2021: 2%) per annum.

The amount due from subsidiaries mainly relates to recharges of certain expenses from the Authority. The outstanding balance due from subsidiaries is unsecured, interest-free and repayable on demand.

The remaining balances with related parties are unsecured, interest-free and repayable on demand.

During the financial year, other than disclosed elsewhere in the financial statements, the significant transactions with related parties which were carried out in the normal course of business are as follows:

(b) Compensation of key management personnel

Key management personnel remuneration is as follows:

	Group and Authority	
	2022	2021
	\$'000	\$'000
Wages and salaries	5,878	5,535
Employer's contribution to Central Provident Fund	224	235
Board members' allowances	287	270
	6,389	6,040

29 Financial risk management

Overview

The Group has exposure to market risk (including currency, price and interest rate risk), credit risk and liquidity risk from its use of financial instruments.

Risk management framework

The Board is responsible for setting the objectives and underlying principles of financial risk management for the Group. The Management establishes the detailed policies such as exposure limits, risk identification and measurement which are approved by the Board.

The Management measures actual exposure against the limits set and prepares regular reports for the review of the Board. The information presented below is based on information received by key management.

(a) Market risk

Market risk refers to the risk arising from uncertainty in the future values of a financial instrument, resulting from movements in factors such as equity prices, foreign exchange rates and market interest rates. The Group's exposure to each of these factors is presented in the following paragraphs.

Currency risk

The Group is exposed to transactional foreign currency risk to the extent that there is a mismatch between the currencies in which investment funds, forward exchange contracts and futures are denominated in a currency other than the respective functional currency of the Group. The functional currency of the Authority and its subsidiaries is the Singapore dollar (SGD).

The summary of quantitative data about the exposure to currency risk as reported to the management based on its risk management policy is as follows:

Group and Authority	United States Dollar \$'000	Japanese Yen \$'000	Euro \$'000	Canadian Dollar \$'000	Great Britain Pound \$'000	Australian Dollar \$'000	Swedish Krona \$'000	Swiss Franc \$'000
31 March 2022								
Investment funds	398,863	77,237	50,291	56,628	12,196	22,393	6,697	1,515
Forward exchange contracts and futures, net	5,483	1,581	227	121	(37)	202	21	4
	<u>404,346</u>	<u>78,818</u>	<u>50,518</u>	<u>56,749</u>	<u>12,159</u>	<u>22,595</u>	<u>6,718</u>	<u>1,519</u>
Less: Currency forwards	(418,890)	(77,656)	(48,715)	(55,886)	(12,199)	(21,676)	(6,385)	(693)
Net exposure	<u>(14,544)</u>	<u>1,162</u>	<u>1,803</u>	<u>863</u>	<u>(40)</u>	<u>919</u>	<u>333</u>	<u>826</u>

Group and Authority	United States Dollar \$'000	Japanese Yen \$'000	Euro \$'000	Canadian Dollar \$'000	Great Britain Pound \$'000	Australian Dollar \$'000	Swedish Krona \$'000	Swiss Franc \$'000
31 March 2021								
Investment funds	390,746	73,219	59,615	39,677	20,177	14,774	6,709	5,287
Forward exchange contracts and futures, net	2,892	(105)	(295)	–	24	–	(16)	(1)
	<u>393,638</u>	<u>73,114</u>	<u>59,320</u>	<u>39,677</u>	<u>20,201</u>	<u>14,774</u>	<u>6,693</u>	<u>5,286</u>
Less: Currency forwards	(399,638)	(69,182)	(60,139)	(38,469)	(18,434)	(14,935)	(4,468)	(4,776)
Net exposure	<u>(6,000)</u>	<u>3,932</u>	<u>(819)</u>	<u>1,208</u>	<u>1,767</u>	<u>(161)</u>	<u>2,225</u>	<u>510</u>

Sensitivity analysis

A 10% strengthening of the Singapore dollar against the currencies listed below at 31 March would have decreased/(increased) net surplus by the amounts shown below. This analysis assumes that all other variables remain constant.

	Group and Authority	
	Income or expenditure	
	2022	2021
	\$'000	\$'000
United States Dollar	(1,454)	(600)
Japanese Yen	116	393
Euro	180	(82)
Canadian Dollar	86	121
Grant Britain Pound	(4)	177
Australian Dollar	92	(16)
Swedish Krona	33	222
Swiss Franc	83	51

An equal change in the opposite direction would have increased/(decreased) income or expenditure by the same amount.

Price risk

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate arising from changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instruments or its issuer, or factors affecting similar financial instruments traded in the market.

The Group is exposed to price risk arising from its investment funds categorised as financial assets at FVTPL. The risk is managed through fund diversification across different asset classes in various markets. The market risk associated with these investment is the potential loss in fair value resulting from the decrease in the market prices or net asset value of investment funds.

Sensitivity analysis

A 10% decrease in the underlying market prices or net asset value of investment funds at the reporting date, with all other variables remain constant, would decrease net surplus by the following amount:

	Group and Authority	
	2022	
	2022	2021
	\$'000	\$'000
Quoted investment funds	95,029	92,543
Unquoted investment funds	3,315	1,808

A 10% increase in the underlying market prices or net asset value of investment funds would have had the equal but opposite effect to the amounts shown above, on the basis that all other variables remain constant.

Interest rate risk

The Group's exposure to interest rate risk for changes in interest rates arises primarily from cash held with AGD.

The Group periodically reviews and monitors interest rate fluctuations to ensure that the exposure to interest rate risk is within acceptable limits. Surplus funds are placed with AGD.

The table below set out the Group's exposure to interest rate risk.

	Note	Group		Authority	
		2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Variable rate instrument					
Cash held with AGD	8	669,677	584,649	621,071	544,261

Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates at the reporting date would have increased/(decreased) net surplus or deficit by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant.

	Net surplus/(deficit)	
	100bp increase \$'000	100bp decrease \$'000
Group		
31 March 2022		
Variable rate instruments	6,697	(6,697)
31 March 2021		
Variable rate instruments	5,846	(5,846)
Authority		
31 March 2022		
Variable rate instruments	6,211	(6,211)
31 March 2021		
Variable rate instruments	5,443	(5,443)

(b) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligation resulting in financial loss to the Group and the Authority. The carrying amounts of financial assets and contract assets represent the Group and the Authority's maximum exposures to credit risk. The Group and the Authority do not require any collateral in respect of their financial assets.

Cash and cash equivalents are mainly cash held with AGD and banks which have high credit-ratings as determined by international credit-rating agencies. The Group considers that its cash and cash equivalents have low credit risk based on the external credit ratings of the counterparties. The amount of the allowance on cash and cash equivalents was negligible.

The Group limits its credit risk exposure in respect of investments by placing its funds only with professional fund managers recommended by an investment consultant. The Group and the Authority has no collateral in respect of these investments.

Impairment losses

The ageing of trade receivables and contract assets at the reporting date was:

	Group			
	2022		2021	
	Gross \$'000	Impairment losses \$'000	Gross \$'000	Impairment losses \$'000
Not past due	4,439	–	20,736	(234)
Past due less than 3 months	317	(84)	105	(71)
Past due 3 to 6 months	131	(3)	5	
Past due beyond 6 months	396	(157)	–	–
	5,283	(244)	20,846	(305)

	Authority			
	2022		2021	
	Gross \$'000	Impairment losses \$'000	Gross \$'000	Impairment losses \$'000
Not past due	4,357	–	20,736	(234)
Past due less than 3 months	317	(84)	105	(71)
Past due 3 to 6 months	131	(3)	5	
Past due beyond 6 months	396	(157)	–	–
	5,201	(244)	20,846	(305)

For trade receivables and contract assets, the Group applies the simplified approach permitted by the SB-FRS 109, which requires expected lifetime credit losses to be recognised from initial recognition of the receivables.

Based on an assessment of quantitative and qualitative factors that are indicative of the risk of default (including but not limited to external ratings, audited financial statements, management accounts and cash flow projections, and available press information, if available, and applying experienced credit judgement), these exposures are considered to have low credit risk. There was no impairment loss recognised for other receivables during the year.

	Group and Authority	
	2022	2021
	\$'000	\$'000
At 1 April	305	47
Impairment loss recognised in income or expenditure	244	341
Amounts written off	–	(60)
Write back due to monies received recognised in income or expenditure	(305)	(23)
At 31 March	244	305

The impairment in trade receivables is due to several debtors who have not paid their outstanding amounts despite reminders. The Group and the Authority wrote-off \$Nil (2021: \$60,000) which have been assessed as, and deemed uncollectible. In 2021, the Authority agreed for several of its debtors to pay the outstanding amount via instalments. In accordance with the instalment payment plans, \$Nil (2021: \$234,000) is not past due. In applying the assessment of quantitative and qualitative factors, the Group determines this amount to be impaired.

(c) Liquidity risk

Liquidity risk is the risk of not being able to meet financial obligations arising from fluctuations in cash flow of financial assets.

The Group and the Authority are not subject to regulatory requirement to maintain minimum cash level. It is the policy of the Group and the Authority to maintain a level of cash deemed adequate by the management to finance its operations and mitigate the effects of fluctuations in cash flows.

The financial liabilities of the Group and the Authority are presented in the statements of financial position. The current liabilities are non-interest bearing and repayable within one year from the end of the reporting period. The financial assets of the Group and the Authority are able to meet these financial obligations.

The following are the contractual maturities of financial liabilities of the Group and Authority. The amounts are gross and undiscounted, and include estimated interest payments and exclude the impact of netting arrangements:

Group	Carrying amount \$'000	Cash flows			More than five years \$'000
		Contractual cash flows \$'000	Within a year \$'000	Between one to five years \$'000	
2022					
Non-derivative financial liabilities					
Trade and other payables*	(120,444)	(120,444)	(120,444)	–	–
Lease liabilities	(72,963)	(77,574)	(12,763)	(46,947)	(17,864)
	(193,407)	(198,018)	(133,207)	(46,947)	(17,864)
Derivative financial instruments					
Forward exchange contracts and futures (gross-settled):	11,984				
- Outflow		(836,262)	(836,262)	–	–
- Inflow		848,246	848,246	–	–
Forward exchange contracts and futures (gross-settled):	(3,972)				
- Outflow		(275,902)	(275,902)	–	–
- Inflow		271,930	271,930	–	–
	8,012	8,012	8,012	–	–
	(185,395)	(190,006)	(125,195)	(46,947)	(17,864)

Group	Carrying amount \$'000	Cash flows			More than five years \$'000
		Contractual cash flows \$'000	Within a year \$'000	Between one to five years \$'000	
2021					
Non-derivative financial liabilities					
Trade and other payables*	(101,527)	(101,527)	(101,527)	–	–
Lease liabilities	(84,833)	(90,660)	(13,382)	(50,274)	(27,004)
	(186,360)	(192,187)	(114,909)	(50,274)	(27,004)
Derivative financial instruments					
Forward exchange contracts and futures (gross-settled):	6,183				
- Outflow		(744,320)	(744,320)	–	–
- Inflow		750,503	750,503	–	–
Forward exchange contracts and futures (gross-settled):	(4,306)				
- Outflow		(248,600)	(248,600)	–	–
- Inflow		244,294	244,294	–	–
	1,877	1,877	1,877	–	–
	(184,483)	(190,310)	(113,032)	(50,274)	(27,004)

* Excludes derivatives (shown separately).

	Carrying amount \$'000	Cash flows			More than five years \$'000
		Contractual cash flows \$'000	Within a year \$'000	Between one to five years \$'000	
Authority					
2022					
Non-derivative financial liabilities					
Trade and other payables*	(106,843)	(106,843)	(106,843)	–	–
Lease liabilities	(72,856)	(77,467)	(12,656)	(46,947)	(17,864)
Amount due to a subsidiary	(12,240)	(12,720)	(240)	(12,480)	–
	<u>(191,939)</u>	<u>(197,030)</u>	<u>(119,739)</u>	<u>(59,427)</u>	<u>(17,864)</u>
Derivative financial instruments					
Forward exchange contracts and futures (gross-settled):	11,984	–	–	–	–
- Outflow		(836,262)	(836,262)	–	–
- Inflow		848,246	848,246	–	–
Forward exchange contracts and futures (gross-settled):	(3,972)	–	–	–	–
- Outflow		(275,903)	(275,903)	–	–
- Inflow		271,930	271,930	–	–
	<u>8,012</u>	<u>8,011</u>	<u>8,011</u>	<u>–</u>	<u>–</u>
	<u>(183,927)</u>	<u>(189,019)</u>	<u>(111,728)</u>	<u>(59,427)</u>	<u>(17,864)</u>
2021					
Non-derivative financial liabilities					
Trade and other payables*	(98,200)	(98,200)	(98,200)	–	–
Lease liabilities	(84,406)	(90,232)	(13,061)	(50,167)	(27,004)
Amount due to a subsidiary	(12,000)	(12,720)	(240)	(12,480)	–
	<u>(194,606)</u>	<u>(201,152)</u>	<u>(111,501)</u>	<u>(62,647)</u>	<u>(27,004)</u>
Derivative financial instruments					
Forward exchange contracts and futures (gross-settled):	6,183	–	–	–	–
- Outflow		(744,320)	(744,320)	–	–
- Inflow		750,503	750,503	–	–
Forward exchange contracts and futures (gross-settled):	(4,306)	–	–	–	–
- Outflow		(248,600)	(248,600)	–	–
- Inflow		244,294	244,294	–	–
	<u>1,877</u>	<u>1,877</u>	<u>1,877</u>	<u>–</u>	<u>–</u>
	<u>(192,729)</u>	<u>(199,275)</u>	<u>(109,624)</u>	<u>(62,647)</u>	<u>(27,004)</u>

* Excludes derivatives (shown separately).

The maturity analyses show the contractual undiscounted cash flows of the Group's financial liabilities on the basis of their earliest possible contractual maturity. The cash inflows/(outflows) disclosed represent the contractual undiscounted cash flows relating to derivative financial liabilities held for risk management purposes and which are usually not closed out prior to contractual maturity. The disclosure shows gross cash inflow and outflow amounts for derivatives that have simultaneous gross cash settlement e.g. forward exchange contracts and

futures. It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

(d) Capital management

The Group and the Authority manage its capital to ensure that the Group and the Authority will continue as going concern. The capital structure of the Group and the Authority comprise only equity as reflected in the statements of changes in equity.

The Group and the Authority review its capital structure periodically. As part of this review, the cost of capital and associated risks are considered. The Authority is not subject to any capital requirements under the IMDA Act or any other externally imposed capital requirements, except for those mandated by the Ministry of Finance.

(e) Accounting classifications and fair values

Determination of fair values

Financial assets at FVTPL

The fair value of the quoted investment funds was based on the market bid price.

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. These instruments were included in Level 3.

Other financial assets and liabilities

The carrying amounts of cash and cash equivalents, trade and other receivables, trade and other payables and amount due from subsidiaries are assumed to approximate their fair values because of the short period to maturity.

Valuation techniques and significant unobservable inputs

The following table show the valuation techniques used in measuring Level 2 and Level 3 fair values, as well as the significant unobservable inputs used.

Financial instruments measured at fair value

Type	Valuation Technique	Significant unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
Group and Authority			
Financial instruments at FVTPL	<i>Market comparison technique:</i> The Group and the Authority used a variety of methods and made assumptions that were based on market conditions existing in prior year. The fair value of unquoted investment funds was based on realisation price provided by the professional fund managers of those investment funds.	Fund manager's reliance on third party market data providers (which may involve using of financial models, historical trade data or comparable security information) with regard to the realisation price used in determining the value of investment funds.	The estimated fair value of financial assets at FVTPL classified under Level 2 and 3 would decrease if the valuation of realisation price was lower.
Authority			
Amount due to a subsidiary	<i>Discounted cash flows:</i> The fair value of amount due to a subsidiary is calculated based on discounted expected future principal and interest cash flows at the market rate of interest at 1.7% (2021: 0.9%) at the reporting date.	Not applicable.	Not applicable.

Fair value hierarchy

The table below presents the fair value measurements for financial assets and financial liabilities, by the levels in the fair value hierarchy based on the inputs to valuation techniques. There are no transfers between levels in both prior and current year.

The different levels are defined as follows:

- (i) quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1);
- (ii) inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. prices) or indirectly (i.e. derived from prices) (Level 2); and
- (iii) inputs for the asset or liability that are not based on observable market data (unobservable inputs) (Level 3).

The carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy are as follows. It does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

	Note	Carrying amount			Fair value				
		Amortised cost \$'000	Mandatorily at FVTPL \$'000	Other financial liabilities \$'000	Total \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
Group									
31 March 2022									
Assets									
Financial assets measured at fair value									
Financial assets at FVTPL	9	–	995,426	–	995,426	957,640	4,638	33,148	995,426
Financial assets not measured at fair value									
Cash and cash equivalents	8	736,472	–	–	736,472				
Trade and other receivables *	10	11,339	–	–	11,339				
		<u>747,811</u>	<u>–</u>	<u>–</u>	<u>747,811</u>				
Liabilities									
Financial liabilities measured at fair value									
Forward exchange contracts and futures	14	–	3,972	–	3,972	1,611	2,361	–	3,972
Financial liabilities not measured at fair value									
Trade and other payables	14	–	–	120,444	120,444				
Lease liabilities	15	–	–	72,963	72,963				
		<u>–</u>	<u>–</u>	<u>193,407</u>	<u>193,407</u>				

* Excludes prepayments

	Note	Carrying amount			Fair value				
		Amortised cost \$'000	Mandatorily at FVTPL \$'000	Other financial liabilities \$'000	Total \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
Group									
31 March 2021									
Assets									
Financial assets measured at fair value									
Financial assets at FVTPL	9	–	949,690	–	949,690	927,437	4,172	18,081	949,690
Financial assets not measured at fair value									
Cash and cash equivalents	8	708,923	–	–	708,923				
Trade and other receivables *	10	41,835	–	–	41,835				
		<u>750,758</u>	<u>–</u>	<u>–</u>	<u>750,758</u>				
Liabilities									
Financial liabilities measured at fair value									
Forward exchange contracts and futures	14	–	4,306	–	4,306	1,176	3,130	–	4,306
Financial liabilities not measured at fair value									
Trade and other payables	14	–	–	101,527	101,527				
Lease liabilities	15	–	–	84,833	84,833				
		<u>–</u>	<u>–</u>	<u>186,360</u>	<u>186,360</u>				

* Excludes prepayments

	Note	Carrying amount			Fair value				
		Amortised cost \$'000	Mandatorily at FVTPL \$'000	Other financial liabilities \$'000	Total \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
Authority									
31 March 2022									
Assets									
Financial assets measured at fair value									
Financial assets at FVTPL	9	–	995,426	–	995,426	957,640	4,638	33,148	995,426
Financial assets not measured at fair value									
Cash and cash equivalents	8	687,866	–	–	687,866				
Trade and other receivables *	10	11,224	–	–	11,224				
Amount due from subsidiaries		511	–	–	511				
		<u>699,601</u>	<u>–</u>	<u>–</u>	<u>699,601</u>				
Liabilities									
Financial liabilities measured at fair value									
Forward exchange contracts and futures	14	–	3,972	–	3,972	1,611	2,361	–	3,972
Financial liabilities not measured at fair value									
Trade and other payables	14	–	–	106,843	106,843				
Lease liabilities	15	–	–	72,856	72,856				
Amount due to a subsidiary		–	–	12,240	12,240	–	12,114	–	12,114
		<u>–</u>	<u>–</u>	<u>191,939</u>	<u>191,939</u>				

* Excludes prepayments

	Note	Carrying amount			Fair value				
		Amortised cost \$'000	Mandatorily at FVTPL \$'000	Other financial liabilities \$'000	Total \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
Authority									
31 March 2021									
Assets									
<i>Financial assets measured at fair value</i>									
Financial assets at FVTPL	9	–	949,690	–	949,690	927,437	4,172	18,081	949,690
<i>Financial assets not measured at fair value</i>									
Cash and cash equivalents	8	668,535	–	–	668,535				
Trade and other receivables *	10	43,264	–	–	43,264				
Amount due from subsidiaries		1,265	–	–	1,265				
		<u>713,064</u>	<u>–</u>	<u>–</u>	<u>713,064</u>				
Liabilities									
<i>Financial liabilities measured at fair value</i>									
Forward exchange contracts and futures	14	–	4,306	–	4,306	1,176	3,130	–	4,306
<i>Financial liabilities not measured at fair value</i>									
Trade and other payables	14	–	–	98,200	98,200				
Lease liabilities	15	–	–	84,406	84,406				
Amount due to a subsidiary		–	–	12,000	12,000	–	12,378	–	12,378
		<u>–</u>	<u>–</u>	<u>194,606</u>	<u>194,606</u>				

* Excludes prepayments

30 Subsequent events

Issuance of shares

On 13 May 2022, the Authority issued 4,962,500 shares at \$1 per share. The shares issued are held by Minister for Finance, incorporated by the Minister for Finance (Incorporation) Act. These issued shares have the same rights as existing shares.

In June 2022, the Authority subscribed for an additional 2,520,000 new shares in Singapore Trade Data Exchange Services Pte Ltd, an associate, for a total cash subscription amount of \$2,520,000. The Authority's total equity interest in Singapore Trade Data Exchange Services Pte Ltd remains at 40%.

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