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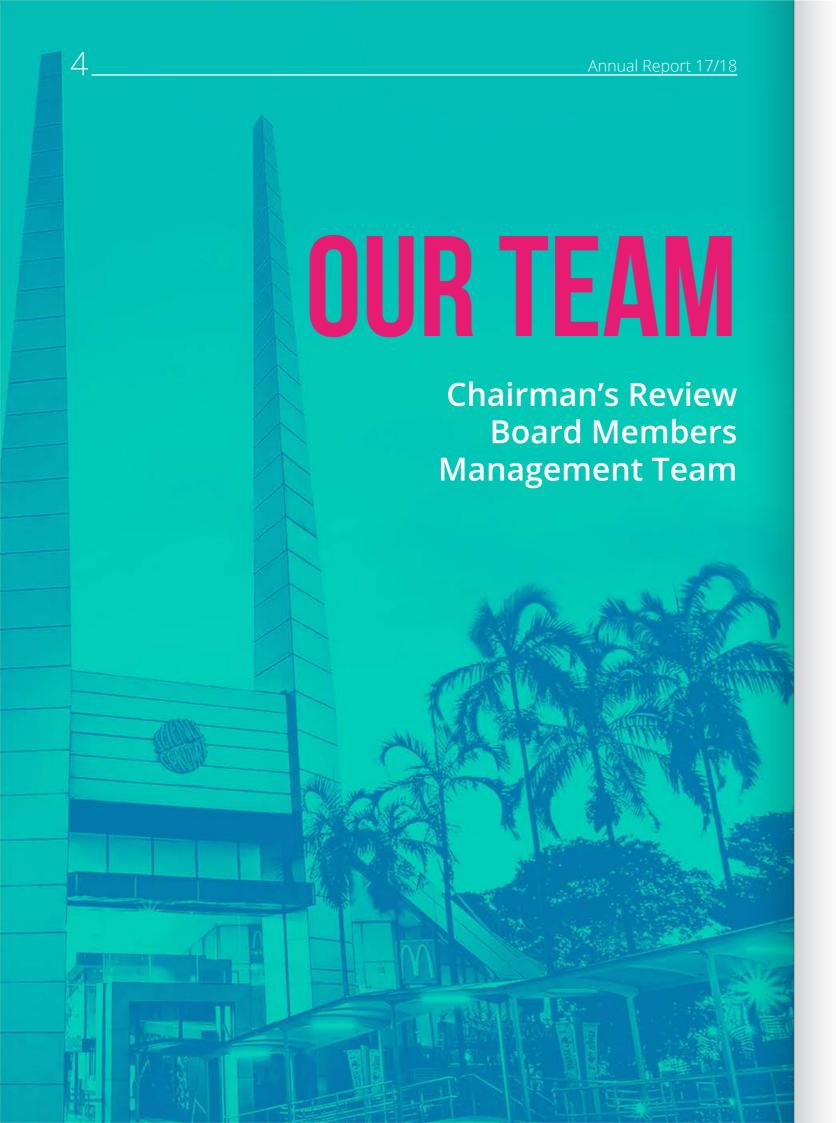
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### CHAIRMAN'S REVIEW

### Introduction

In 2017, Science Centre Singapore marked 40 years of inspiring the public and its partners in the fields of science, technology, engineering and mathematics (STEM). The Centre organised a series of engaging and entertaining events throughout the year to celebrate this milestone. As we look back on the past 40 years, we also look towards the future: how the Centre can continue its mission and vision in the coming decades.

### **#SCSNEXT40**

The #SCSNEXT40 hashtag first appeared in our 40<sup>th</sup> anniversary celebratory collaterals – from press releases to social media platforms, cataloguing the events, exhibitions and education programmes organised around our four decades of science that befriend and transform the minds of millions.





An array of activities marked this important milestone, with special events like Picnic Under the Planets receiving more than 6,000 attendees to the 40-word Facebook Competition that welcomed guests – past and present – to pen fond memories they had of the Centre. The Centre also opened new exhibitions such as The Mind's Eye and Professor Crackitt's Light Fantastic mirror maze, which provided our main entrance with a much needed makeover.

Each of these planned initiatives aimed to create E.P.I.C. (experiential, participatory, image-driven and connected) moments with our guests and their positive feedback spurred us further in our endeavours to curate inspiring experiences.

Indeed, the use of the hashtag served not only as a means of documenting the celebrations, but also as a symbol for the Centre to aspire towards the next 40 years: to be an organisation that stays relevant with the changing times and to continue to lead in the area of edutainment.

### The Guest Experience

With a greater emphasis on tailored experiences for individuals, the Centre made efforts to understand guests who visited the exhibitions, attended the events and participated in the educational programmes. It was, and still is, of utmost importance that all visitors are treated as guests of the Centre, and as a host we ensured prompt and impeccable service, and help create memorable experiences. Crowd favourites include our live science shows such as the Cryogenic Science Show that featured energetic educators, captivating science topics and amazing performances garnering excellent reviews from young and old, as well as astronomy events, especially the Once in a Blue Moon, attracting both astronomy

enthusiasts and the general public who wanted to get a glimpse of this rare total lunar eclipse.

The positive feedback gathered from these shows and events, provided the Centre with a better understanding about the type of content that resonates well with the audiences. Hence, we were able to tweak and improve our offerings to cater to their needs.

### Young and Young at Heart

Continuing with its efforts to grow its audiences, new initiatives were introduced to attract tourists and young adults. Both audiences enjoy the edutainment elements of the Centre that in turn spurred SCS staff to innovate new ways to connect with these guests. Tapping on the growing culture to share experiences on social media platforms, many photo-taking opportunities were introduced to encourage our guests to share their experiences.

Another new initiative was the After-Hours events to engage different spectrum of audiences, mainly the youth in this case. At the same time, the Centre also engaged seniors and recruited them as guides for the Dialogue with Time – Embrace Ageing exhibition. The senior guides have shown that age is just a number, especially with their tenacity towards life and lifelong learning.

Events and activities like these allowed the Centre to keep abreast with the evolving industry trends, spurring the Centre towards experimentation in science communication. In doing so, the Centre discovered alternative avenues to share with people the wonders and impact of science.



- Science educators from Gallery
   Programmes conducting a science
   experiment at the Picnic Under the
   Planets event
- 2. A live band performing at Phobia Party, the first After-Hours event held in conjunction with the opening of the Phobia<sup>2</sup> exhibition



### BOARD MEMBERS



Ms Tan Yen Yen



1. A senior guide explaining the Yellow and Pink Rooms to students at the Dialogue with Time – Embrace Ageing exhibition

### Support & Appreciation

Four decades of success as an established name in informal science education would not have been possible without the support of our esteemed partners, distinguished sponsors and community of board members, staff and volunteers. They have in one way or other played a part in helping build and mould the Science Centre that we have today.

On this journey as we move into the next 40 years and beyond, I look forward to more inspiring moments with Science Centre Singapore.

Ms Tan Yen Yen Chairman Science Centre Board



Mr Soh Gim Teik



Mr Hian Goh



Ms Shirley Wong

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Ms Cherie Nursalim



Mr Chandran Nair



Mr Cheong Chee Hoo



Mr Zaqy Mohamad



Mr Lim Eng Hwee



Ms Melissa Ow



Mr Sin Kim Ho



Mr Chew Kwee San



Ms Tricia Huang



Mr Howie Lau



Ms Leonie Lee

### **MANAGEMENT TEAM**











Director,

Ms Kamaria Abdul Ghani

Mr Michael Chay Director,

Business Development









Mr Lee Lian Soon Assistant Director, Travelling Exhibitions & Special Projects



Mr Edwin Teng Assistant Director, MIS



Mr Eugene Wambeck Acting Assistant Director, Exhibitions

Mr Mohd Jaafar Bin Dollah Assistant Director, Facilities & Estate Management



# Highlights **Awards**

### HIGHLIGHTS

From competitions to celebrations, Science Centre Singapore organised numerous engaging activities for guests from all walks of life throughout the entire year. These events ranged from student-focused competitions to 40th Anniversary festivities that involved both partners and the public. Through the various learning experiences offered, the importance of STEM was reinforced.



1. A mother posing with her son at the Visual SG 2017 Light Field exhibition

### Advocates of STE(A)M

While the Centre continues to do well and do good in STEM education and advocacy, more recently greater emphasis has been given to STEAM, which is the addition of arts (A) into the combination of subjects. As such, aside from familiar events like Tech Saturday, Tinkerama and Caltex Fuel Your School Tech Jam that provided opportunities for students to learn basic coding and engineering concepts, the Centre held events that incorporated arts into its STEM programming.

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Visual SG is one good example where interactive and static artworks by both established and budding artists were showcased at the Centre. The PAssionArts Festival – ScienceArts as One exhibition is another example of a community art project organised by the seven Community Art and Culture Clubs (CACCs) from Jurong, Yuhua and Bukit Batok SMC, in collaboration with the People's Association and Science Centre.

As it requires a different set of skills and competencies to understand STEAM, the Centre hopes to spur audiences to embrace holistic learning and an open-mindedness to the possibilities of science and arts complementing each other via its plethora of STEAM initiatives.

### An Overseas Connection

Globalisation has led to a rapid acquisition and consumption of information and knowledge, which means that news about the Centre and its endeavours can reach wider audiences. Inevitably, the Centre now plays host to a growing number of foreign delegations and participants, who visit the Centre to learn and compete with our best.

Take the inaugural Asia Drone Championship that happened in August 2017 for example – the event attracted several teams from countries like Brunei, Thailand and the Philippines to put their flying machines to the test. Malaysian and Indonesian journalists have also visited the Centre, as they were interested in sharing our latest exhibitions with their readers and viewers back home. The Centre also welcomed distinguished guests from science centres and ministries around the world, as their leaders recognised the Centre and its diverse achievements.





### Our Anniversary

The Centre embarked on its anniversary celebrations that included educational programmes such as the riveting Brain Fest and its escape room-themed tasks, the Good Old Days Family Picnic and Movie that saw more than 2,000 people enjoy an evening of activities, before culminating in the Charity Gala Dinner, which was graced by Mr Ng Chee Meng, the then Minister for Education (Schools) and keen supporter of the Centre's efforts. In his presence, the Centre rolled out the new website design, staged a Spectacular Science Show that received rave reviews from the audience, and conducted a silent auction which helped raised more than \$250,000 for Community Chest's beneficiaries. Each guest also received a souvenir magazine created to commemorate its 40th Anniversary. The magazine detailed various anniversary initiatives.

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### **AWARDS**

### 2018

### **Service to Education Award 2018**

Awarded to Associate Professor Lim Tit Meng for service as School Advisory/Management Committee/Board Member (A/Prof Lim was appointed Vice-Chairman of First Toa Payoh Primary School in 2017.)

by Ministry of Education

### **Public Sector Transformation Award 2018**

Star Manager awarded to Lawrence Yeap (Senior Manager, Creative Design, Facilities & Estate Management, Operations)

by Public Service Division

### 2017

### 2017 MOE Innergy Awards (HQ)

Gold Award for DC Motor and AC Generator Visualization Kit (A STaR Kit developed in collaboration with Academy of Singapore Teachers.)

by Ministry of Education

### 2017 MOE Innergy Awards (Stat Board)

Bronze Award for The Tinkering Studio

by Ministry Of Education

### **National Day Award**

Long Service Medal awarded to -

Dr Savita Sharma (Senior Manager, Life Sciences, Education Programmes)

Mr Nambirajan Kandaiah (Technician, Life Sciences, Education Programmes)

Mr Wong Wei Kee (Senior Technician, Facilities & Estate Management, Operations)

Efficiency Medal awarded to -

Mr Paari Perumal (Manager, Exhibit Maintenance, Exhibitions)

by Prime Minister Office

### Mendaki Award

Awarded to Nabilah Binte Ithnin (Science Educator, Life Sciences, Education Programmes)

by Yayasan Mendaki

### **Excellent Service Award (EXSA)**

10 Star Awards, 10 Gold Awards and 21 Silver Awards to Science Centre staff

by Association of Singapore Attractions and SPRING Singapore

### 2017 Marketing Events Award

Silver Award for Best Event – Social Media for Picnic Under the Planets

by Marketing Magazine

### 2017 Media Publishers Association of Singapore Awards

Education Project of the Year for the Asian Scientist Writing Prize 2017 competition

by Media Publishers Association

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# EVENTS, EXHIBITIONS & PROGRAMIES

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Timeline of Events
Exhibitions
Science Outreach & Competitions
STEM Inc
SSCG Pte Ltd

# TIMELINE OF EVENTS

### 2017

### **APRIL**

Picnic Under the Planets
International Science Drama Competition 2017
The Tinkering Studio – MOU Signing with Imagin8ors
A\*STAR Talent Search 2017
Tech Saturday

#### MAY

Tinkerama (Istana Open House)
Launch of the Chipsleys at Snow City
BrainFest 2017
Launch of Dino Robot Factory Exhibition
Tan Kah Kee Young Inventors' Awards 2017
Children's Season
Tinker Fest: Illusions

### JUNE

Launch of The Mind's Eye and Professor Crackitt's Light Fantastic Exhibition

### **JULY**

The Good Old Days Family Picnic and Movie
Asian Scientist Writing Prize 2017
KidsSTOP™ - MOU Signing with My First Skool
Media Preview for Singapore Science Festival 2017
Singapore Maker Extravaganza
Visual SG: Make Visual!
Science Buskers Festival 2017

### **AUGUST**

Sony Creative Science Awards 2017 Asia Drone Championship 2017 PAssionArts Festival 2017 - ScienceArts as One Exhibition

### **SEPTEMBER**

**National Robotics Competition** Launch of Digital Food Exhibition

#### **OCTOBER**

Caltex Fuel Your School Tech Jam Snow City - Halloween in the Snow Launch of Circus! Science Under The Big Top! Exhibition Snow City - Oktoberfest in the Snow Phobia<sup>2</sup>: The Science of Fear Exhibition

### 2018

### **JANUARY**

Singapore Robotic Games 2018 Google STEM Conference Once in a Blue Moon – Total Lunar Eclipse

### **FEBRUARY**

Gallery Programmes – DiscovHER

### MARCH

The Bright Ideas Challenge 2018 FOSSASIA 2018 Gallery Programmes – insπre

### **EXHIBITIONS**

### **PERMANENT EXHIBITIONS**

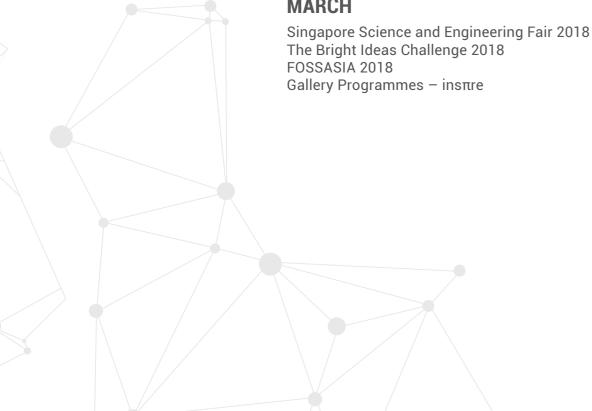
### The Mind's Eye and Professor Crackitt's Light Fantastic

The entrance gallery was revamped to feature enigmatic exhibits that show guests the joy of observation and reveal what we perceive may not always align with what we experience as the senses are tricked into believing otherwise.

1. Maternal Hands, a custom made optical illusion sculpture located at the entrance of the exhibition

Back by popular demand after 20 years, a new mirror maze was specially co-created by the Centre and Adrian Fisher Design Ltd, the







world's leading creator of mirror mazes and a record holder of seven Guinness World Records. Professor Crackitt's Light Fantastic is the largest mirror maze in Asia and features 105 mirror cells as well as numerous interactive exhibits designed to bring out the science elements of lights, colours and reflection set within a compelling storyline. Backed by the physics of lights, colours, and reflection, the new mirror maze also gave guests a chance to formulate an escape route that could be mired by reflections.

### Phobia<sup>2</sup>: The Science of Fear

Phobia<sup>2</sup>: The Science of Fear, the latest exhibition specially curated by the Centre, explores the topic of fear: from its historical and cultural significance, to the psychology and physiology of fear and how it affects our daily lives while generating a low level of anxiety throughout the unique experience. Its use of original pop-art designs and bespoke concepts aims to delight and impress guests of all ages.

- 1. A guest having a "screaming" good time at the Phobia<sup>2</sup> exhibition
- 2. Professor Crackitt's Light Fantastic mirror maze and its Instagram-able moments are a hit with youths
- 3. A senior guide having a dialogue with the guests in the yellow zone, which explores the limitations one experiences with age

### Dialogue with Time – Embrace Ageing

A unique exhibition themed around the topic of ageing was launched on 10 November by Minister of Health Dr Gan Kim Yong. The Centre's first fully-guided exhibition, 32 senior guides aged between 65 to 85 years were specially recruited to lead this interactive experience.



The dialogue gets guests to start thinking about ageing which is a natural process that everyone goes through and how they can shape their own ageing journey. Insightful dialogues with the senior guides also help to debunk misconceptions and assumptions about ageing.

More than 10,000 guests have visited the exhibition thus far. Of these, 4,000 guests have attended our guided tours. The exhibition was curated in partnership with Ministry of Health.

### The Tinkering Studio

### Creators-In-Residence Programme

The studio was proud to host the GEEK Festival in conjunction with Singapore Maker Extravaganza from 20 to 24 July 2017. This annual festival is a collaboration among artists, engineers, gamers and programmers from the United Kingdom that focuses on games as educational play.

### Tinker Technique

This year, the Tinkering Studio started a series of Tinker Technique parent-child workshops that aim to inculcate lifelong skills in the next generation. The workshops explore specific STEAM (Science, Technology, Engineering, Art and Mathematics) concepts and tool techniques, and is also a fun family bonding session.

### Global Children's Designathon

More than 400 children participated in the Global Children's Designathon held on 11 November 2017. Representing Singapore, Tel Aviv, Nairobi, London, Amsterdam and Vancouver, these young participants went through the various stages of the designathon process. These included: inspire, research, ideate, sketch, prototype and present.

### **TEMPORARY EXHIBITIONS**

### Dino Robot Factory

20 May - 27 Aug 2017

This travelling exhibition from Japan offered an interactive experience designed to promote an interest in engineering and robotics through the process of creating a robot dinosaur. The exhibits allowed children to pick up fundamental robotics and engineering concepts in a fun and engaging way, which was further augmented by handson activities and workshops for public and schools.

### Digital Food

20 Sep - 22 Nov 2017

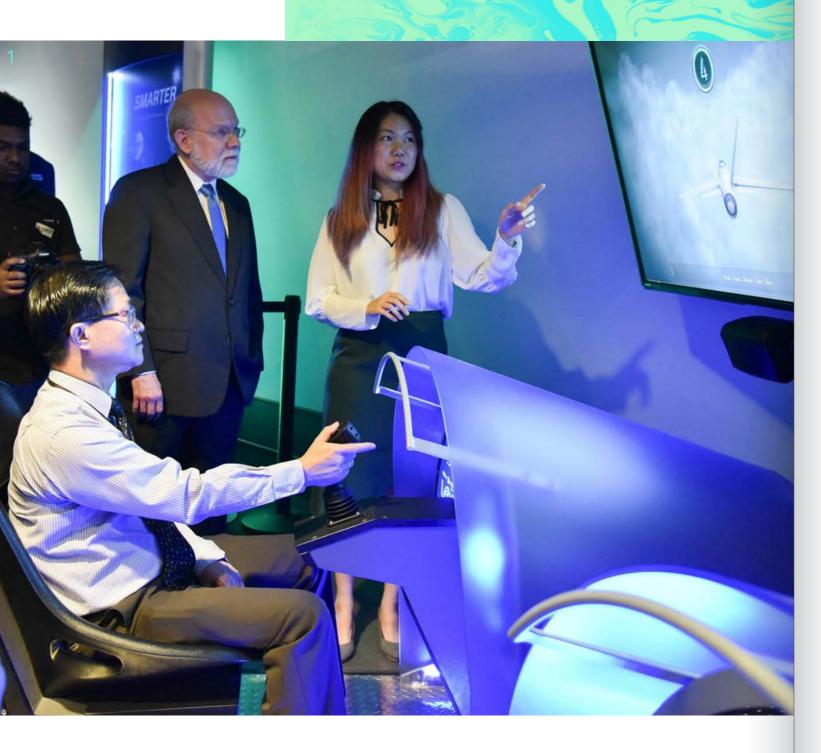
Digital Food, a temporary exhibition specially curated for the Centre focused on a unique perspective and understanding of how our perception of flavour changes over time. The exhibition showcased how humans have been recreating flavours through synthetic and artificial means, as well as how digital technology could be integrated into our dining experiences in the future.

### Circus! Science Under the Big Top!

28 Oct 2017 - 18 Mar 2018

1. SCB Chief Executive Assoc Prof Lim Tit Meng and Ms Mah Chin Keak, Vice President of Mediacorp VizPro International, at the evening launch of the Circus exhibition Themed around the timeless topic with a broad appeal, the Circus! exhibition invited guests to get a closer look at some of the most mind-boggling and death-defying circus acts. Guests satisfied their curiousity and were given opportunities to immerse themselves in the science behind some of these iconic circus performances.





### Above and Beyond: The Ultimate Interactive Flight Exhibition

16 Dec 2017 - 8 Apr 2018

Launched on 16 December 2017, Above and Beyond celebrated the power of innovation to make dreams take flight. This travelling aerospace exhibition produced by Evergreen Exhibitions and presented by Boeing and the Centre featured immersive simulations, interactive design challenges, iconic historical touchstones, visionary concepts for the future and inspiring stories from gamechanging innovators, past and present.

SCIENCE OUTREACH &

**COMPETITIONS** 

### Science Buskers Festival 2017

The Science Buskers Festival is an annual event jointly organised by A\*STAR and the Centre, with support from the Ministry of Education (MOE). The festival encourages the development of an individual's communication skills through expressions of science in creative manners, specifically a "show-and-tell" on any science topic. In 2017, more than 430 participants, or 167 teams, from primary, secondary, tertiary and working adults, took part in this festival to showcase their science communication skills through busking.



1. Assoc Prof Lim, Mr Jolyon Caplin, Chairman of the Science Busker Festival Advisory Committee and Prof Sow Chorng Haur of National University of Singapore posing with some of the buskers on the final day of the Festival

<sup>1.</sup> Assoc Prof Lim demonstrating the Full
Throttle flight simulation exhibit as
Ralph L. "Skip" Boyce, Vice President,
Boeing International and President,
Boeing Southeast Asia looks on changing in

### Singapore Science Festival 2017

Jointly organised by A\*STAR and the Centre, the Singapore Science Festival (SSF) is the largest annual science event in Singapore that celebrates the dynamism of science, engineering, technology and biomedicine.



Every year the festival adopts a new focus and in 2017, the theme was "Future Health", showcasing how Science, Technology, Engineering and Mathematics (STEM) can be applied in our daily lives. From 20 July to 19 August 2017, more than 35 events, seminars and shows were organised to engage the youths, adults and families. Close to 90,000 people participated in various activities under the SSF 2017.

### A\*STAR Talent Search 2017

Out of the 608 applicants, 78 students qualified for the shortlisting round, of which eight outstanding finalists emerged. After a round of gruelling interviews with a panel of seven esteemed judges from A\*STAR, the Centre, NTU, NUS and SUTD, the results were announced at the A\*TS & SSEF Awards Presentation Ceremony on 28 April 2017. Rachel Qing Pang from Raffles Girls' School (Secondary) clinched the first prize, while Clement Wong and Teddy Ong – both from NUS High School of Maths and Science – won second and third prize respectively.

### National Science Challenge 2017

Over the past 13 years, more than 150 secondary schools have participated in the National Science Challenge (NSC), a televised science quiz series developed by A\*STAR and the Science Centre to spark an interest in science among students as well as members of the public, and to create fun and exciting learning opportunities for both participants and the audience. In NSC 2017, a total of 42 teams vied for the ultimate championship over a course of six episodes.

### Sony Creative Science Award 2017

The Sony Creative Science Award (SCSA) is an annual toy competition initiated in 1998. Jointly organised by the Sony Group of Companies in Singapore and the Centre with the support of MOE, the competition provides students an opportunity to learn about science beyond the classrooms, in a fun and enjoyable way through

2. Assoc Prof Lim and then Minister for Education (Schools) Mr Ng Chee Mend interacting with some of the SCSA 2017 winners





### National Science Experiment 2017

Launched in 2015, the National Science Experiment (NSE) is a large-scale experiment that involves students exploring ubiquitous sensing using the SENSg device and understanding how vital environmental and lifestyle information can be derived using big data technologies.

In 2017, 92 teams from 45 schools took part in the Big Data Challenge that encouraged participants to come up with innovative insights and applications based on the ready data collected during the NSE trial period. The finals took place at Singapore University of Technology and Design and the awards ceremony was graced by Minister for Communications and Information, Dr Yaacob Ibrahim.

Nanyang Girls' High School reclaimed the first place for the Secondary category, while the Singapore Polytechnic team won first place in the Post-Secondary Category.

### National Robotics Competition 2017

National Robotics Competition (NRC), previously known as National Junior Robotics Competition (NJRC) from 1999 to 2016, is an annual event organised by the Centre and supported by MOE and various partners. In the past 18 years, the competition attracted more than 50,000 participants and 230,000 supporters.

Since the revamp in 2017, the competition is now a series of four competitions, namely the WeDo 2.0 Junior Challenge, Science Automatica, World Robot Olympiad Challenges and Robot Arm Challenges. The revamp of NRC was an effort by the organising committee to refresh the competition and maintain its relevance in an ever-evolving educational and technological landscape. The revamp also allowed the competition to reach out to more students with a wider range of interests and skills.

A total of 586 teams participated in NRC 2017, with more than 1,700 students vying for top honours. Winners from the WRO categories had the opportunity to represent Singapore at the prestigious World Robot Olympiad (WRO) that was held in San Jose, Costa Rica, from 10 to 12 November.

### Singapore Science & Engineering Fair 2018

320 teams made up of upper secondary and junior college students showcased their outstanding research work at the annual Singapore Science and Engineering Fair (SSEF). 20 teams from the Junior Scientists category, where participants aged 15 and below, also presented their research at the fair. The participants and their projects were judged by close to 500 judges from various institutions, agencies and organisations.

123 teams were awarded either a Gold, Silver, Bronze or Merit award. In addition, five organisations known for championing STEM-related careers sponsored and awarded SSEF Special Awards to five SSEF winners in this 18<sup>th</sup> edition of the competition. These organisations were IChemE, Institute of Engineers, Singapore Society for Microbiology and Biotechnology, Singapore Association for the Advancement of Science and Yale-NUS College. Winners were selected based on their student project reports or interviews on SSEF Judging Day.

Two teams and four individual students went on to represent Singapore in the Intel International Science and Engineering Fair (Intel ISEF) held in May 2018 in the USA., held May 2018 in the USA. A winner from the Junior Scientist category represented Singapore in the Broadcomm Masters delegation at the Intel ISEF as well.

### Singapore Amazing Flying Machine Competition 2018

Jointly organised by DSO National Laboratories and the Science Centre, the Singapore Amazing Flying Machine Competition (SAFMC) is an annual event where students from primary, secondary and tertiary schools compete at national and international levels. The competition is an educational platform comprising five challenging categories where youth and aviation enthusiasts design and build innovative flying machines.

SAFMC 2018 was held from 29 March to 6 April and drew local and international participation, with a record high 1,628 participants and 430 teams. In celebration of the competition's tenth anniversary, SAFMC 2018 introduced new sub-categories such as 'Paper Wonders' in Category A – Paper Plane Challenge, 'Longest Time Aloft' in Category B – Unpowered Planes Challenge, and 'First Person View (FPV) in the Category C2 – FPV Challenge. SAFMC will continue to inspire young minds and nurture youth in the fields of Science, Technology, Engineering and Mathematics.

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### STEM Inc

In the past three years, STEM Inc reached out to 68 secondary schools through its STEM Applied Learning Programme (ALP). The STEM Industrial Partnership Programme (IPP) has also benefitted close to 2,500 students and teachers, with a total of 86 activities organised last year.

This year, STEM Inc boosted its efforts by organising two showcases in January and September for schools to learn about the 48 newly developed Applied Learning projects. The school-based Teacher Training workshops also received strong take-ups. In addition, a Digital Fabrication Space (DFS) was set up to drive STEM innovation and creativity, encourage technopreneurship, and serve as a lifelong learning and training space for teachers to develop useful skills.

To promote the application of STEM skills and real-world problem solving, STEM Inc continued to collaborate with industry and educational partners to organise competitions and special

programmes. The National Science Experiment (NSE) Big Data Challenge 2017 was one such competition: Teams had to design their own experiment, collect data with the help of fellow schoolmates using the SENSg devices, perform data analytics, and then draw conclusions that aid in public policy formation in Singapore.

Likewise, the Bright Ideas Challenge 2017 sponsored by Shell Singapore attracted 261 students from 70 teams and 33 schools. Greenview Secondary School won the first prize with their idea of converting food scraps to energy through anaerobic digestion in a treatment facility.

Other programmes that STEM Inc worked on include Infineon Technologies' Chips@School engagement programme and STEM'in with Google. As an effort to inspire females to consider STEM careers, STEM Inc arranged for 180 female students to visit the Google office in June and November. The students also participated in a panel discussion with female Google engineers, followed by a card game-based programming workshop.

- 1. Then Minister for Education (Schools), Mr Ng Chee Meng, posing with The Bright Ideas Challenge 2017 winning team, Greenview Secondary School (Team Changemakers)
- 2. A STEM educator explaining the new Applied Learning Project Autonomous Drone to teachers at the Continued Support showcase event



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### SINGAPORE SCIENCE CENTRE GLOBAL (SSCG)

Science Centre Holdings Pte Ltd, the commercial arm of the Centre, was renamed to Singapore Science Centre Global Pte Ltd (SSCG) in November 2017. A new Board of Directors was constituted to provide strategic direction for the company.

In January 2018, SSCG collaborated with Marshall Cavendish Education Hong Kong on the STEM Thematic Programme, a series of STEM resources for primary and secondary students. The programme was first launched in Hong Kong, then in Singapore on 29 January 2018 during the inaugural Google STEM Conference. The programme and other SSCG products were marketed to China and countries in ASEAN, which led to more franchise and licensing roadshow opportunities in the region.



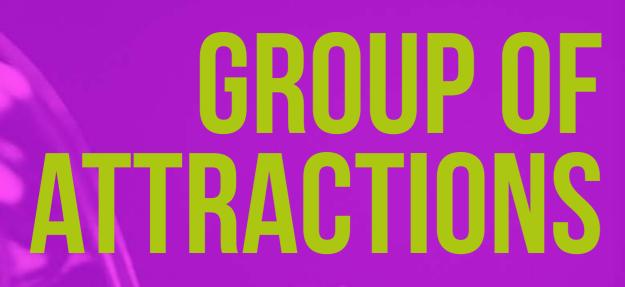


- Participants at the Science
   Experiential Learning Journey
   workshop
- Children making jam in a Kitchen Science workshop, part of the Science Experiential Learning Journey programme

With Singapore's reputation in science education, SSCG successfully welcomed and hosted many student groups from the Asia Pacific through its Science Experiential Learning Journey, an intensive STEM programme where students have at least two days of hands-on workshops on science topics such as DNA and Kitchen Science.

With the support of IMDA and Singtel, as many as 75,000 "I am a Young IT Whiz" cards were distributed to primary schools. The card content was refreshed to include new topics on digital and media literacy so as to better educate young users on the safe use of technology.

SSCG also co-developed a specially designed teaching resource kit known as the DC Motor and AC Generator Visualization Kit which bagged the MOE Innergy (Headquarters) Gold Award 2017.



KidsSTOP™ Snow City Omni-Theatre Butterflies Up-Close

### **KidsSTOP**<sup>TM</sup>

KidsSTOP™ continued to enjoy strong support from guests clocking more than 170,000 visitors. The attraction has been successful in establishing a loyal following for its school programmes as well as its signature holiday workshops. In addition, regular ground activities such as PlayMaking and Tinkering sessions enthralled and engaged the attendees.

On 10 July 2017, KidsSTOP™ signed a three-year Memorandum of Understanding with My First Skool at 51 Fernvale Link, the largest childcare centre managed by NTUC First Campus. The partnership aimed to increase knowledge and confidence in delivering science-related content and enabled preschool teachers to work



<sup>1.</sup> Then Minister for Social and Family Development, Mr Tan Chuan-Jin and Dr Lam Pin Min, MP for Sengkang West at the opening of the new My First Skool centre in Fernvale

with KidsSTOP™ science educators to co-create STEM-based activities for their students. On-site learning at KidsSTOP™ also complemented the programmes taught at the childcare centre. The synergy would also benefit children from AWWA Early Intervention Centre who share learning resources and participate in STEM-related events within the same compound.

Another new event was the *Show You Can!* competition. Themed "Happy, Healthy Me," the event offered pre-schoolers a platform to showcase their talents by combining science and drama, allowing them to creatively demonstrate their understanding of leading a happy and healthy lifestyle. Prizes for the event were sponsored by Cerebos Pacific Limited.

In September, KidsSTOP<sup>TM</sup> organised a Family Fun Race in conjunction with the Centre's  $40^{th}$  anniversary celebrations. 57 parent-child teams participated in the race competing to complete the maximum number of tasks in the shortest time. Ms Low Yen Ling, Mayor for South West CDC, graced the event and flagged off the morning race.

In November 2017, KidsSTOP™ held its first convocation ceremony for "graduates" of the KidsSTOP™ Academy Programme. This programme was designed to ignite an interest in science among young children by combining creative drama and hands-on activities to impart knowledge. PhD recipient Brenden Neo represented this cohort and gave a light hearted speech about his learning journey.



<sup>1.</sup> Parent-child teams working together to complete tasks at the Family Fun Race

### Snow City mascots (from left to right) Koko the Fox, Ila the Husky, and Nooka the Polar Bear meet and greet the audience at the Snow Fun House

### **SNOW CITY**

Snow City participated in the International Association of Amusement Parks and Attractions (IAAPA) Asian Attractions Expo that was held at the Marina Bay Sands Expo and Convention Centre in June 2017. The attraction showcased its expertise as Singapore's first permanent indoor snow centre and offered a unique mobile snow experience to potential partners.



This included the Snow Fun House, a mobile snow chamber that was launched in 2016. Snow City also partnered with Changi Airport to bring the attraction to Terminal 3 offering guests an authentic winter experience in the tropics. Close to 12,000 guests from Singapore and other countries enjoyed winter activities such as sledding on the snow luge and taking photos with the snow-themed displays. Following the success, a similar experience was created with the Snow Fun House at Parkway Parade in December 2017 that welcomed 8,500 guests.

More recently, Snow City launched an outdoor camping programme for students and youths to provide outdoor learning opportunities. Participants experienced the sub-zero temperature to understand life in a cold climate. This outdoor camping programme included team-building activities, outdoor cooking, and other activities for participants to pick up necessary survival skills and build up resilience in adverse climates.

<sup>2.</sup> Preschoolers performing at the Show You Can! competition

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### **OMNI-THEATRE**

The Omni-Theatre continued to enthral guests as Southeast Asia's first 8K 3D digital dome theatre. The movies screened in FY 2017 were One World One Sky, Back to the Moon for Good, Dinosaurs at Dusk, Mysteries of the Unseen World, Robots and Aurora: Lights of Wonder. Guests enjoyed mesmerising footages of the celestial light show captured at Yellowknife, Canada in 4K resolution. The theatre also screened Natural Selection 3D and held live planetarium shows presented by a science educator who delivered immersive educational experiences with shows such as Exploring New Worlds, Asteroids and a seasonal highlight, Secrets of the Christmas Star.

1. Live planetarium shows, conducted by a Science Educator, offer an experiential journey to the edge of Space





# BUTTERFLIES UP-CLOSE

Live butterflies at Singapore's first indoor butterfly sanctuary attracted more than 68,000 guests in its second year of operation. The exhibition brought nature science to life and delighted young and old alike. The experience was enriching as guests learnt about various species of butterflies, including the Common Birdwing, Malay Lacewing and Common Rose. In addition, precious memories were created for young children who celebrated their birthdays in the themed function room.

## COMMUNITY & PARTNERS



### VOLUNTEER PROGRAMME

This FY, a total of 242 volunteers from all walks of life joined the Centre in befriending guests through floor engagement and activity interaction for an enhanced experience.



On weekday afternoons, volunteers from the Retired & Senior Volunteer Programme (RSVP) roam the galleries, challenging guests to a series of engaging puzzles that they have to solve. These 18 RSVP volunteers contributed a total of 1,826 hours of volunteering services.

Student volunteers were more active over the weekends and conducted simple science experiments at various activity booths for a small audience and accumulated a total of of 7,986 volunteering hours at the Centre.

Volunteers at the Observatory also contributed to the Centre, dedicating a total of 602 hours of volunteer services in assisting with the Stargazing sessions on Fridays, as well as the Solar Observations during the year-end holidays.

Group photo of some of the RSVP volunteers

Annual Report 17/18 Annual Report 17/18 Annual Report 17/18

The Centre continued to build on its relationships with existing partners for the volunteer programme, working with volunteers from Nanyang Technological University (NTU) Hall of Residence 7 and Singapore Polytechnic Library Club for Mindfest 2017 and Young Learners' Festival 2017 respectively. Students from School of the Arts Singapore (SOTA) also educated our guests on the importance of practising good eye habits through showcases in the galleries.

The Centre also welcomed volunteers from new organisations. We had undergraduates from James Cook University who volunteered as timekeepers and station masters during the KidsSTOP™ Family Fun Race in September 2017.

Science Centre has greatly benefitted from the efforts of all our volunteers. Moving ahead, we look forward to collaborating with more people to share and inspire through science.

1. Student volunteers working with children on a Young Learners Festival activity



# LIST OF SPONSORS

- 1. Abbott Laboratories (Singapore) Pte Ltd
- 2. Agency for Science, Technology & Research
- 3. Applied Materials South East Asia Pte Ltd
- 4. Asia Pacific Centre of Management Education
- 5. Autodesk Asia Pte Ltd
- 6. Bloomberg L.P.
- 7. Chevron Singapore Pte Ltd
- 8. Cerebos Pacific Limited
- 9. Cognizant Technology Solutions Asia Pacific Pte Ltd
- 10. Dassault Systemes Singapore Pte. Ltd.
- 11. Defence Science & Technology Agency
- 12. DSO National Laboratories
- 13. Earth Observatory of Singapore
- 14. Education Development Center, Inc
- 15. Health Promotion Board
- 16. Info-communications Media Development Authority
- 17. MapleBear International Schoolhouse Pte Ltd
- 18. Media Literacy Council
- 19. Ministry of Health
- 20. National Heritage Board Museum Roundtable
- 21. National Research Foundation
- 22. People's Association
- 23. Pilot Pen (S) Pte Ltd
- 24. Shell Eastern Petroleum Pte Ltd
- 25. Singapore Totalisator Board
- 26. Singapore Technologies Endowment Programme
- 27. Singapore Telecommunications Ltd
- 28. Singapore University of Technology & Design
- 29. SkillsFuture Singapore
- 30. Sony Electronics Asia Pacific Pte Ltd

### SPONSORSHIP FUND

### Science Centre Board Sponsorship Fund Programmes & Activities

The principal activities of the Science Centre Board Sponsorship Fund are to:

- Promote interest, learning and creativity in science and technology through imaginative and enjoyable experience and contribute to the nation's development of its human resource;
- Conduct supplementary science classes, lectures, demonstrations and workshops to complement the school syllabi;
- Produce and publish scientific literature in the form of magazines and guidebooks;
- Organise activities and programmes for general and targeted audiences so as to bring science closer to the people; and
- Screen planetarium programmes and OMNIMAX films to students and general public, using state-of-the-art audiovisual projection systems.

### **Board Members**

Chairman: Ms Tan Yen Yen Members: Mr Soh Gim Teik

Mr Hian Goh Ms Shirley Wong

Mr Bruce Poh

Ms Cherie Nursalim
Mr Chandran Nair
Mr Cheong Chee Hoo
Mr Zaqy Mohamad
Mr Lim Eng Hwee
Ms Melissa Ow

Mr Sin Kim Ho Mr Chew Kwee San

Ms Tricia Huang Mr Howie Lau Ms Leonie Lee

### Key Executive Management

Chief Executive: Assoc Prof Lim Tit Meng

**Senior Director,** 

**Education Programmes:** 

Mrs Anne Dhanaraj

**Senior Director,** 

Projects & Exhibitions:

Mr Daniel Tan

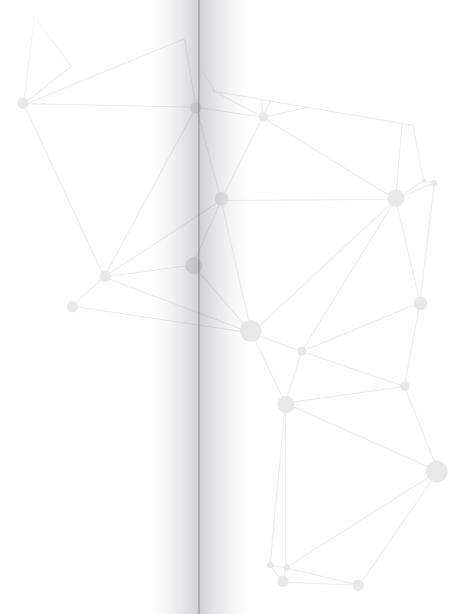
Quality Service Manager.

Mrs Veronica Heng

### Conflict of Interest Policy

The Science Centre Board has implemented a conflict of interest policy that covers both the Board members and the staff. The document procedures require the Board members and staff to make a declaration of potential or actual conflicts of interest at the start of their term of office or at the start of their employment of service respectively. Thereafter, Board members are required to provide updates whenever there are changes to the original declaration, while staff are required to make such declarations annually.

Reserves policy is not applicable as funds received are used for their intended purposes.



# DISTINGUISHED GUESTS

### 2017

### MAY

**Delegation from Petrosains, The Discovery Centre**MOU Signing with Science Centre Singapore

### JUNE

**Delegation from Tianjin Science and Technology Museum** Learning Trip – Exhibitions and Science Communication

### JULY

#### Dr Vivian Balakrishnan

Minister for Foreign Affairs Maker Faire Singapore 2017

Delegation from Ministry of Energy, Thailand (Thailand Energy Technology for Environment Research Centre (ETERC)) and Chiang Mai University

Learning Trip – Energy Innovation Programme and Events

### **AUGUST**

#### **Delegation from Gwacheon National Science Museum**

Learning Trip - Exchange on Science Centres

#### **Dato' Sri Michael Manyin anak Jawong**

Sarawak Minister for Education, Science and Technological Research and his delegation
Learning Trip – STEM Education

Annual Report 17/18 Annual Report 17/18

#### Ms Grace Fu

Minister for Culture, Community and Youth PAssionArts Festival 2017 - Science Art as One

#### Mr Ng Chee Meng

Minister for Education (Schools) & Second Minister for Transport Sony Creative Science Award 2017

### **NOVEMBER**

### Dr Gan Kim Yong

Minister for Health Launch of Dialogue with Time – Embrace Ageing exhibition



### Executive Committee

Chairman: **Members:** 

Mr Chandran Nair



Chairman: Mr Soh Gim Teik Members: Mr Bruce Poh

Mr Sin Kim Ho

Ms Tricia Huang

Ms Leonie Lee



### Finance & Investment Committee

**Chairman:** Mr Hian Goh

Members:

Mr Chew Kwee San

Mr Zaqy Mohamad Ms Cherie Nursalim

Mr Cheong Chee Hoo

Mr Howie Lau

### Advancement Committee

Chairman: Ms Shirley Wong
Members: Ms Melissa Ow

Mr Lim Eng Hwee Mr Chew Kwee San Mr Chandran Nair

Ms Cherie Nursalim

Mr Howie Lau

### PROJECT COMMITTEE

- 1. A\*STAR Talent Search 2017 Awards Committee
- 2. Energy Innovation Challenge 2017 Organising Committee
- 3. National Science Challenge 2017 Review, Working & Science Content Committees
- 4. SAYES 2017 Executive Committee
- 5. Science Buskers Festival 2017 Advisory Committee
- 6. Singapore Science & Engineering Fair 2017 Working Committee
- 7. Singapore Science Festival 2017 Steering and Working Committees
- 8. Sony Creative Science Award 2017 Organising Committee



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# FINANCIAL REPORT

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### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

(Established under the Science Centre Act, Cap. 286)

### **ANNUAL REPORT**

For the financial year ended 31 March 2018

(Established under the Science Centre Act, Cap. 286)

#### ANNUAL REPORT

For the financial year ended 31 March 2018

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#### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

#### STATEMENT BY DIRECTORS

For the financial year ended 31 March 2018

In the opinion of Science Centre Board (the "Board"),

- (a) the consolidated financial statements of the Group as set out on pages 6 to 53 are drawn up so as to present fairly, in all material respects, the financial position of the Board and of the Group as at 31 March 2018, and the financial performance of the business, changes in capital, funds and accumulated surplus of the Board and of the Group and cash flows of the Group for the financial year then ended; and
- (b) proper accounting and other records have been kept, including records of all assets of the Group whether purchased, donated or otherwise have been kept in accordance with the provisions of the Science Centre Act, Cap. 286 (the "Act"); and
- (c) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Board during the financial year have been made in accordance with the provisions of the Act.

On behalf of the Board

Ms Tan Yen Yen

Chairman

Associate Professor Lim Tit Meng

Chief Executive

4 June 2018

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### KPMG

SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

Independent auditors' report For the financial year ended 31 March 2018

#### Independent auditors' report

Science Centre Board and its Subsidiaries

#### Report on the audit of the financial statements

#### Opinion

We have audited the financial statements of Science Centre Board ("the Board") and its subsidiaries ("the Group"), which comprise the consolidated balance sheet of the Group and the balance sheet of the Board as at 31 March 2018, the statements of comprehensive income, and statements of changes in capital, funds and accumulated surplus of the Group and the Board and the consolidated statement of cash flows of the Group for the year then ended, and notes to the financial statements, including a summary of accounting policies, as set out on pages 6 to 53.

In our opinion, the accompanying consolidated financial statements of the Group and the balance sheet, statement of comprehensive income, statement of changes in capital, funds and accumulated surplus of the Board are properly drawn up in accordance with the provisions of the Science Centre Act, Cap. 286 ('the Act') and Statutory Board Financial Reporting Standards ("SB-FRS") so as to present fairly, in all material respects the state of affairs of the Group and the Board as at 31 March 2018 and the results and changes in equity of the Group and the Board and cash flows of the Group for the year ended on that date.

#### Basis for opinion

We conducted our audit in accordance with Singapore Standards on Auditing ('SSAs'). Our responsibilities under those standards are further described in the 'Auditors' responsibilities for the audit of the financial statements' section of our report. We are independent of the Group and the Board in accordance with the Accounting and Corporate Regulatory Authority Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ('ACRA Code') together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Other information

Management is responsible for the other information contained in the annual report. Other information is defined as all information in the annual report other than the financial statements and our auditors' report thereon.

We have obtained the Statement by the Board of the Science Centre Board, prior to the date of this auditors' report.

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

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

If, based on the work we have performed on the other information obtained prior to the date of this auditors' 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.

Responsibilities of management and the Board of Directors for the financial statements

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

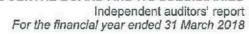
A statutory board is constituted based on its Act and its dissolution requires Parliaments' approval. In preparing the financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless there is intention to wind up the Board or for the Board to cease operations.

The Board of Directors is responsible for overseeing the Group's financial reporting process.

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

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





- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal controls 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 controls.
- 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 auditors' 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 auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the
  entities or business activities within the Group to express an opinion on the
  consolidated financial statements. We are responsible for the direction, supervision
  and performance of the group audit. We remain solely responsible for our audit
  opinion.

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

#### Report on Other Legal and Regulatory Requirements

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



SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

Independent auditors' report For the financial year ended 31 March 2018

#### Other Matter

During the course of our audit, nothing came to our attention that caused us to believe that the receipts, expenditure and investment of moneys and the acquisition and disposal of assets by the Board during the financial year have not been made in accordance with the provisions of the Act.

KPMG LLP

Public Accountants and Chartered Accountants

Singapore 4 June 2018

### STATEMENT OF COMPREHENSIVE INCOME

For the financial year ended 31 March 2018

GROUP		General Funds					Total		
	Note		2017	2018	2017	2018	2017		
Income		\$	\$	\$	\$	\$	\$		
- Admission fees		4,991,956	4,602,383	_	_	4,991,956	4,602,383		
- Proceeds from special projects		562,505	1,316,874	_	-	562,505	1,316,874		
- Fees from courses and									
programmes		1,158,564	1,065,300	-	-	1,158,564	1,065,300		
<ul> <li>Collections from exhibits and</li> </ul>									
events		704,338	290,684	-	-	704,338	290,684		
- Sales of merchandise and		000 200	1 222 505			000 200	4 222 505		
publications - Service income		998,260 669,277	1,222,505 417,336	-	-	998,260 669,277	1,222,505 417,33 <del>6</del>		
- Rental income		73,142	417,330	-	-	73,142	417,330		
- Photo-taking income		169,489	203,564	-	-	169,489	203,564		
Thoto taking moome		9,327,531	9,118,646			9,327,531	9,118,646		
		0,021,001	0,110,040			0,021,001	3,110,040		
Other income	4	2,082,062	1,903,171	1,048,222	1,170,664	3,130,284	3,073,835		
Other (losses)/gains - net	5	(488)	(27)	88,803	156,496	88,315	156,469		
Expenses									
- Employee compensation	6	(20,705,012)	(21,463,579)	(240,122)	(187,808)	(20,945,134)	(21,651,387)		
- Materials for exhibits and events		(9,403,795)	, , , ,	(546,492)	(704,965)	(9,950,287)	(6,118,270)		
<ul> <li>Repairs and maintenance</li> </ul>		(6,311,479)	(5,910,854)	(13,276)	(2,842)	(6,324,755)	(5,913,696)		
<ul> <li>Publicity and promotions</li> </ul>		(2,569,997)	(2,430,370)	(19,131)	(22,751)	(2,589,128)	(2,453,121)		
- Depreciation	16	(3,770,277)	(4,135,552)	(4,600)	(1,178)	(3,774,877)	(4,136,730)		
<ul> <li>Other expenditure</li> </ul>	7	(4,198,647)	,	(172,698)	(195,931)	(4,371,345)	(4,407,458)		
- Finance expenses	8	(1,880)	(586)	•	-	(1,880)	(586)		
		(46,961,087)	(43,565,773)	(996,319)	(1,115,475)	(47,957,406)	(44,681,248)		
(Deficit)/surplus before grants		(35,551,982)	(32,543,983)	140,706	211,685	(35,411,276)	(32,332,298)		
Operating grants from government Grants from other government	17	32,200,552	30,152,938	-	-	32,200,552	30,152,938		
agencies	11	3,099,458	1,067,555	_	-	3,099,458	1,067,555		
Deferred capital grants amortised	21	1,233,865	1,242,318	4,600	1,178	1,238,465	1,243,496		
		36,533,875	32,462,811	4,600	1,178	36,538,475	32,463,989		
Surplus/(deficit) before tax		981,893	(81,172)	145,306	212,863	1,127,199	131,691		
Income tax credit/(expense)	9	4,474	(3,101)	<del>-</del>	-	4,474	(3,101)		
Net surplus/(deficit) and total comprehensive income		986,367	(84,273)	145,306	212,863	1,131,673	128,590		

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### STATEMENT OF COMPREHENSIVE INCOME

For the financial year ended 31 March 2018

BOARD		General Funds		Restricte	d Funds	Total		
	Note	2018	2017	2018	2017	2018	2017	
		\$	\$	\$	\$	\$	\$	
Income								
- Admission fees		4,022,018	3,501,422	-	-	4,022,018	3,501,422	
- Proceeds from special projects		565,082	1,319,642	-	-	565,082	1,319,642	
- Fees from courses and						•	, ,	
programmes		778,153	738,543	-	-	778,153	738,543	
- Collections from exhibits and		•	,			,	,	
events		711,250	290,684	-	_	711,250	290,684	
- Sales of merchandise and		,				111,200	200,004	
publications		787,172	868,083	_	_	787,172	868,083	
- Service income		26,049	43,044	_	_	26,049	43,044	
- OCIVIOC INCOME		6,889,724	6,761,418			6,889,724	6,761,418	
		0,003,124	0,701,410			0,009,124	0,701,410	
Other income	4	2.005.644	4 000 005	4 040 000	4 470 004	2 422 002	2 022 000	
Other income	4	2,085,641	1,860,005	1,048,222	1,170,664	3,133,863	3,030,669	
Other (leases) (seize	-	(400)	(07)	00.000	450 400	00.045	450 400	
Other (losses)/gains - net	5	(488)	(27)	88,803	156,496	88,315	156,469	
<b>5</b>								
Expenses	_							
- Employee compensation	6		(20,314,636)	(240,122)			(20,502,444)	
<ul> <li>Materials for exhibits and events</li> </ul>		(9,391,365)	(5,403,563)	(602,567)	(759,495)			
<ul> <li>Repairs and maintenance</li> </ul>		(5,736,250)	(5,382,891)	(13,276)	(2,842)			
<ul> <li>Publicity and promotions</li> </ul>		(2,378,894)		(19,131)	(22,751)	(2,398,025)	(2,311,944)	
- Depreciation	16	(3,351,033)	(3,698,046)	(4,600)	(1,178)	(3,355,633)	(3,699,224)	
<ul> <li>Other expenditure</li> </ul>	7	(4,069,242)	(3,652,115)	(172,698)	(195,931)	(4,241,940)	(3,848,046)	
- Finance expenses	8	(1,880)	(586)		-	(1,880)	(586)	
•		(44,279,832)	(40.741.030)	(1,052,394)	(1.170.005)	(45,332,226)	(41,911,035)	
			· · · · · · · · · · · · · · · · · · ·			. , , ,	( 1, , , , , , , , , , , , , , , , , , ,	
(Deficit)/surplus before grants		(35,304,955)	(32,119,634)	84,631	157 155	(35 220 324)	(31,962,479)	
(= one of each place policie grants		(00,001,000)	(02,110,001)	0.,00.	107,100	(00,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(01,002,710)	
Operating grants from government	17	32,200,552	30.152.938	_	_	32,200,552	30,152,938	
Grants from other government	17	02,200,002	00,102,000			JL,200,352	50, 152,550	
agencies	11	3,076,240	1,055,607			3,076,240	1 055 607	
•	21	, ,		4.600	4 470		1,055,607	
Deferred capital grants amortised	21	1,201,335	1,204,028	4,600	1,178	1,205,935	1,205,206	
		36,478,127	32,412,573	4,600	1,178	36,482,727	32,413,751	
Net surplus and total		4 11114 11114						
comprehensive income		1,173,172	292,939	89,231	158,333	1,262,403	451,272	

### **BALANCE SHEETS**

As at 31 March 2018

		Group		Board		
	Note	2018 2017		2018	2017	
	NOIC	\$	\$	\$	\$	
ASSETS		•	Ψ	*	*	
Current assets						
Cash and cash equivalents	10	28,624,938	24,145,695	27,947,422	23,415,119	
Trade and other receivables	11	3,424,069	3,674,118	3,452,283	3,715,580	
Financial asset at fair value through profit			-,,			
or loss	12	4,317,805	4,229,002	4,317,805	4,229,002	
Held-to-maturity financial assets	13		1,002,500		1,002,500	
Inventories	14	397,173	575,750	168,579	205,302	
		36,763,985	33,627,065	35,886,089	32,567,503	
Non-current assets						
Held-to-maturity financial assets	13	1,018,000	1,018,000	1,018,000	1,018,000	
Investments in subsidiaries	15	.,,	-	1,760,002	1,760,002	
Property, plant and equipment	16	22,628,747	25,130,699	21,576,734	23,822,596	
· · · · · · · · · · · · · · · · · · ·		23,646,747	26,148,699	24,354,736	26,600,598	
Total assets		60,410,732	59,775,764	60,240,825	59,168,101	
1000, 00000			00,7,0,70	00,210,00	0011001101	
LIABILITIES						
Current liabilities						
Government grants received in advance	17	11,204,226	10,153,612	11,204,226	10,153,612	
Other government grants received in	• • • • • • • • • • • • • • • • • • • •	1 1,20 1,220	10,100,012	. 1,20 1,220	10,100,012	
advance	11	1,990,216	725,188	1,990,216	725,188	
Sponsorship received in advance	18	762,156	888,850	762,156	888,850	
Trade and other payables	19	4,941,057	7,022,922	4,673,950	6,470,678	
Current income tax liabilities	9	.,011,007	7,541	.,,	-	
	Ŭ	18,897,655	18,798,113	18,630,548	18,238,328	
Non-current liabilities		10,001,000	10,100,110	.0,000,010	10,200,020	
Other payables		25,407	-	_	_	
Deferred income tax liabilities	20	48,253	55,478	_	-	
Deferred capital grants	21	16,116,922	17,269,971	16,027,412	17,147,931	
Dolorios capital granto	- 1	16,190,582	17,325,449	16,027,412	17,147,931	
Total liabilities		35,088,237	36,123,562	34,657,960	35,386,259	
Total habilities		00,000,201	30,123,002	04,001,000	00,000,200	
NET ASSETS		25,322,495	23,652,202	25,582,865	23,781,842	
NET AGGETG		20,022,700	20,002,202	20,002,000	20,701,042	
CAPITAL, FUNDS AND ACCUMULATED						
SURPLUS						
	22	2,979,983	2,979,983	2,979,983	2,979,983	
Capital account Share capital	23	7,959,330	6,969,710	7,959,330	6,969,710	
Omni-theatre development fund	25 25	122,780	122,780	122,780	122,780	
Accumulated surplus:	20	122,100	122,700	122,100	122,100	
General funds		6 600 360	6 064 002	7,029,655	6,307,483	
Restricted funds	24	6,600,269 7,660,133	6,064,902 7,514,827	7,029,655	7,401,886	
	24	1,000,133	1,014,02/	1,431,111	7,901,000	
Total capital, funds and accumulated		25 222 405	22 652 202	25 502 055	22 704 842	
surplus		25,322,495	23,652,202	25,582,865	23,781,842	

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

#### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### STATEMENTS OF CHANGES IN CAPITAL, FUNDS AND ACCUMULATED SURPLUS For the financial year ended 31 March 2018

			Omni-	<u>Accumulat</u>		
GROUP	Capital account \$	account capital		General <u>funds</u> \$	Restricted funds	<u>Total</u> \$
2018 Beginning of financial year	2,979,983	6,969,710	122,780	6,064,902	7,514,827	23,652,202
Issue of new shares (Note 23)	-	989,620	-	-	-	989,620
Total comprehensive (loss)/income	-	-	-	986,367	145,306	1,131,673
Dividends paid	-	-	-	(451,000)	-	(451,000)
End of financial year	2,979,983	7,959,330	122,780	6,600,269	7,660,133	25,322,495
2017 Beginning of financial year	2,979,983	6,165,076	122,780	6,149,175	7,301,964	22,718,978
Issue of new shares (Note 23)	-	804,634	-	<del></del>	-	804,634
Total comprehensive (loss)/income	-	-	-	(84,273)	212,863	128,590
End of financial year	2,979,983	6,969,710	122,780	6,064,902	7,514,827	23,652,202

### STATEMENTS OF CHANGES IN CAPITAL, FUNDS AND ACCUMULATED SURPLUS For the financial year ended 31 March 2018

			Omni-	Accumulated surplus			
Capital account \$		Share <u>capital</u> \$	theatre development <u>fund</u> \$	General funds \$	Restricted funds	Total \$	
2018 Beginning of financial year	2,979,983	6,969,710	122,780	6,307,483	7,401,886	23,781,842	
Issue of new shares (Note 23)	-	989,620	-		-	989,620	
Total comprehensive (loss)/income	-	-	1,173,172		89,231	1,262,403	
Dividends paid	-	-	-	(451,000)	-	(451,000)	
End of financial year	2,979,983	7,959,330	122,780	7,029,655	7,491,117	25,582,865	
2017 Beginning of financial year	2,979,983	6,165,076	122,780	6,014,544	7,243,553	22,525,936	
Issue of new shares (Note 23)	-	804,634	-	-	-	804,634	
Total comprehensive (loss)/income	-	-	-	292,939	158,333	451,272	
End of financial year	2,979,983	6,969,710	122,780	6,307,483	7,401,886	23,781,842	

#### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

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

For the financial year ended 31 March 2018

	Note	2018 \$	2017 \$
Cash flows from operating activities Deficit before grants		(35,411,276)	(32,332,298)
Adjustments for: - Depreciation - Loss on disposal of property, plant and equipment		3,774,877 6,254	4,136,730 4,779
<ul> <li>Sponsorships and donations</li> <li>Changes in fair value of financial asset at fair value through profit or loss</li> </ul>		(999,541) (88,803)	(1,119,330) (156,538)
- Interest income		(266,280) (32,984,769)	(188,810) (29,655,467)
Change in working capital - Inventories - Trade and other receivables - Trade and other payables		178,577 (1,538,495) (2,056,458)	(228,808) (856,777) 383,229
Cash used in operations Income tax paid Net cash used in operating activities		(36,401,145) (10,292) (36,411,437)	(30,357,823) (4) (30,357,827)
Cash flows from investing activities Purchases of property, plant and equipment		(1,279,179)	(683,764)
Purchase of held-to-maturity financial assets Proceeds upon maturity of held-to-maturity financial assets Interest received		1,002,500 266,280	188,810
Net cash used in investing activities		(10,399)	(494,954)
Cash flows from financing activities		33,326,731	33,066,028
Government grants received Sponsorship received Other government grants received		988,874 6,399,962	2,307,185 1,976,367
Excess other government grants refunded Excess sponsorship refunded Issuance of share capital		(160,103) (193,005) 989,620	(1,162,513) - 804,634
Dividends paid Net cash from financing activities		(451,000) 40,901,079	36,991,701
Net increase in cash and cash equivalents Cash and cash equivalents at beginning of financial year		<b>4,479,243</b> 23,145,695	6,138,920 17,006,775
Cash and cash equivalents at end of financial year	10	27,624,938	23,145,695

#### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

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

The financial statements were authorized for issue by members of the Board on 4 June 2018.

#### 1. General information

Science Centre Board (the "Board") is a Statutory Board incorporated under the Science Centre Act (Cap. 286) under the purview of the Ministry of Education ("Government" or "MOE"). The registered office and principal place of business of the Board is 15 Science Centre Road, Singapore 609081.

The principal activities of the Board are to:

- (a) Promote interest, learning and creativity in science and technology through imaginative and enjoyable experience and contribute to the nation's development of its human resource;
- (b) Conduct supplementary science classes, lectures, demonstrations and workshops to complement the school science syllabi;
- (c) Produce and publish scientific literature in the form of magazines and guidebooks;
- (d) Organise activities and programmes for targeted and general audiences so as to bring science closer to the people; and
- (e) Screen planetarium programmes and OMNIMAX films to students and the general public, using state-of-the-art audio-visual projection systems.

The principal activities of the subsidiaries are described in Note 15 to the financial statements.

#### 2. Significant accounting policies

#### 2.1 Basis of preparation

The financial statements have been prepared in accordance with Singapore Statutory Board Financial Reporting Standards ("SB-FRS"). The financial statements have been prepared under the historical cost convention, except as disclosed in the accounting policies below.

#### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

#### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

#### 2. Significant accounting policies (continued)

#### 2.1 <u>Basis of preparation</u> (continued)

The preparation of financial statements in conformity with SB-FRS requires management to exercise its judgement in the process of applying the Group's accounting policies. It also requires the use of certain critical accounting estimates and assumptions. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in Note 3.

### Interpretations and amendments to published standards effective for the financial year ended 31 March 2018

On 1 April 2017, the Group adopted the new or amended SB-FRS and Interpretations to SB-FRS ("INT SB-FRS") that are mandatory for application from that date.

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.

#### 2.2 <u>Subsidiaries</u>

#### Consolidation

Subsidiaries are entities over which the Group has power to govern the financial and operating policies so as to obtain benefits from its activities, generally accompanied by a shareholding giving rise to a majority of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date on which control ceases.

In preparing the consolidated financial statements, transactions, balances and unrealised gains on transactions between group entities are eliminated. Unrealised losses are also eliminated but are considered an impairment indicator of the asset transferred.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.3 Joint operation

A joint operation is an arrangement in which the Group has joint control whereby the Group has rights to the assets, and obligations for the liabilities, relating to an arrangement. The Group accounts for each of its assets, liabilities and transactions, including its share of those held or incurred jointly, in relation to the joint operation.

### 2.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured. The following specific recognition criteria must also be met before revenue is recognised:

### (a) Admission fees

Admission fees are recognised upon the sale of admission tickets to visitors and members. Where such tickets are sold via agents, revenue is recognised at the point of sale unless the difference from recognising revenue over the validity period of the tickets is expected to be material, in which case, an adjustment is made to recognise revenue over the validity period of the tickets.

### (b) Proceeds from special projects

Proceeds from special projects are income from the organisation of temporary exhibitions. Income from such projects is recognised upon the sale of tickets to visitors.

### (c) Fees from courses and programmes

Fees from courses and programmes are recognised over the duration of the courses and programmes.

### (d) Collections from exhibits and events

Collections from exhibits and events comprise mainly of collections from rental of travelling exhibitions and events and are recognised on a straight-line basis over the rental period.

### (e) Sales of merchandise and publications

Sales of merchandise and publications are recognised at the point of sales of the merchandise and publications.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.4 Revenue recognition (continued)

### (f) Service income

Service income from provision of services for set up of travelling exhibitions and organisation of corporate events are recognised when services have been rendered.

### (g) Photo-taking

Income from photo-taking is recognised upon the sale of photos to visitors and members.

### (h) Donations and sponsorships

Donations and sponsorships are received or receivables to meet approved expenditure for specific projects or purposes. Donations and sponsorships are recognised in profit or loss as income in the financial year when the expenditure for the specified projects or purposes is incurred. The amount that is not utilised for the specific projects or purposes is included in the sponsorship received in advance account.

### (i) Rental income

Rental income from operating leases (net of any incentives given to the lessees) is recognised on a straight-line basis over the lease term.

### (i) Interest income

Interest income is recognised using the effective interest method.

### (k) Management fee

Management fee for the provision of services to government agencies is recognised over the period the services are rendered.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.5 Government grants

Grants from the Ministry of Education are recognised as a receivable at their fair value when there is reasonable assurance that the grants will be received and the Group will comply with all the attached conditions.

Government grants are recognised as income over the periods necessary to match them with the related costs which they are intended to reimburse, on a systematic basis. Government grants that are receivable as reimbursement for expenses already incurred are recognised in profit or loss in the period in which they become receivable.

### 2.6 Deferred capital grants

Government grants and contributions from other government organisations utilised for the purchase or construction of depreciable assets are recorded in the deferred capital grants account (shown as liability on the balance sheet).

Government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred capital grants in the balance sheet and transferred to profit or loss over the useful lives of the related assets.

On the disposal of property, plant and equipment, the balance of the related grants is recognised in profit or loss to match the net book value of property, plant and equipment disposed.

### 2.7 <u>Employee compensation</u>

### (a) Defined contribution plans

Defined contribution plans are post-employment benefit plans under which the Group pays fixed contributions into separate entities such as the Central Provident Fund on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid.

### (b) Employee leave entitlement

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

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.7 Employee compensation (continued)

### (c) 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 or profit-sharing plans if the Company 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.

### 2.8 Sponsorship Fund

The Sponsorship Fund is set up to account for contributions received from private organisations and individuals for specified purposes. The Sponsorship Fund has been conferred the Institute of Public Character status under Section 37(2)(c) of the Charities Act since 1 April 2008. The income from the Sponsorship Fund will be used to further the objectives of the Sponsorship Fund. The principal sums of the Sponsorship Fund are presented separately in the balance sheet. The Sponsorship Fund is classified as a restricted fund in accordance with SB-FRS Guidance Note 3.

### 2.9 Endowment Fund

The Endowment Fund is set up to account for contributions received from private organisations, individuals and other government agencies for specified purposes. The Endowment Fund was conferred the Institute of Public Character status under Section 37(2)(c) of the Charities Act from 1 April 2008 to 31 March 2013. The income from the Endowment Fund will be used to further the objectives of the Science Centre Board and specific capacity training for staffs. The principal sums of the Endowment Fund are presented separately in the balance sheet. The Endowment Fund is classified as a restricted fund in accordance with SB-FRS Guidance Note 3.

### 2.10 Omni-Theatre Development Fund

The Omni-Theatre Development Fund was set up to account for contributions received from private organisations and individuals. The principal sums of the Omni-Theatre Development Fund, consisting of donations and sponsorships received, are kept intact. The Omni-Theatre Development fund is classified under general funds in accordance with SB-FRS Guidance Note 3.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.11 Finance costs

Finance expenses comprise interest expense on borrowings that are recognised in profit or loss. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

### 2.12 Income taxes

Current income tax for current and prior periods is recognised at the amount expected to be paid to or recovered from the tax authorities, using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

Deferred income tax is recognised for all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements except when the deferred income tax arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and affects neither accounting nor taxable profit or loss at the time of the transaction.

A deferred income tax liability is recognised on temporary differences arising on investments in subsidiaries, except where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

A deferred income tax asset is recognised to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and tax losses can be utilised.

Deferred income tax is measured:

- (i) at the tax rates that are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date; and
- (ii) based on the tax consequence that will follow from the manner in which the Group expects, at the balance sheet date, to recover or settle the carrying amounts of its assets and liabilities.

Current and deferred income taxes are recognised as income or expense in profit or loss.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.13 Inventories

Inventories are carried at the lower of cost and net realisable value. Cost is determined on a weighted average basis. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

### 2.14 Property, plant and equipment

### (a) Measurement

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

### (b) Component of costs

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

Assets under construction are stated at cost, and comprise construction costs and development costs. Construction costs are recorded based on contract progress payments for certified works and services. Development costs include manpower costs and other construction overheads.

### (c) Depreciation

Depreciation is calculated using the straight-line method to allocate depreciable amounts over their estimated useful lives as follows:

<u>Useful lives</u>

Leasehold land Over lease period of 99 years

Buildings 20 to 50 years

Leasehold improvements 5 years
Furniture and office equipment 3 to 5 years
Motor vehicles 10 years

OMNIMAX films 2 years

No depreciation is provided on assets under construction.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.14 Property, plant and equipment (continued)

### (c) Depreciation (continued)

The residual values, estimated useful lives and depreciation method of property, plant and equipment are reviewed, and adjusted as appropriate, at each balance sheet date. The effects of any revision are recognised in profit or loss when the changes arise.

The following items are written off in the year of construction or purchase:

- Exhibits
- Films (other than OMNIMAX)
- Cost of publications and souvenirs
- Property, plant and equipment costing below \$2,000 each

### (d) Subsequent expenditure

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

### (e) Disposal

On disposal of an item of property, plant and equipment, the difference between the disposal proceeds and its carrying amount is recognised in profit or loss within "Other losses/(gains) – net".

### 2.15 <u>Investments in subsidiaries</u>

Investments in subsidiaries are carried at cost less accumulated impairment losses in the Board's balance sheet. On disposal of investments in subsidiaries, the difference between disposal proceeds and the carrying amounts of the investments are recognised in profit or loss.

### 2.16 Impairment of non-financial assets

Property, plant and equipment Investments in subsidiaries

Property, plant and equipment and investments in subsidiaries are tested for impairment whenever there is any objective evidence or indication that these assets may be impaired.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.16 Impairment of non-financial assets (continued)

For the purpose of impairment testing of these assets, the recoverable amount (i.e. the higher of the fair value less cost to sell and value-in-use) is determined on an individual asset basis unless the asset does not generate cash inflows that are largely independent of those from other assets. If this is the case, recoverable amount is determined for the cash-generating unit ("CGU") to which the asset belongs.

If the recoverable amount of the asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. The difference between the carrying amount and recoverable amount is recognised as an impairment loss in profit or loss.

An impairment loss for an asset is reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The carrying amount of this asset is increased to its revised recoverable amount, provided that this amount does not exceed the carrying amount that would have been determined (net of any accumulated amortisation or depreciation) had no impairment loss been recognised for the asset in prior years. A reversal of impairment loss for an asset is recognised in profit or loss.

### 2.17 Financial assets

### (a) Classification

The Group classifies its financial assets in the following categories: loans and receivables, fair value through profit or loss, and held-to-maturity. The classification depends on the nature of the asset and the purpose for which the assets were acquired. Management determines the classification of its financial assets at initial recognition and in the case of assets classified as held-to-maturity, re-evaluates this designation at each balance sheet date.

### (i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are presented as current assets, except for those expected to be realised later than 12 months after the balance sheet date which are presented as non-current assets. Loans and receivables are presented as "trade and other receivables" (Note 11) and "cash and cash equivalents" (Note 10) on the balance sheet.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.17 Financial assets (continued)

### (a) Classification (continued)

### (ii) Financial assets at fair value through profit or loss

This category has two sub-categories: financial assets held for trading, and those designated at fair value through profit or loss at inception. A financial asset is classified as held for trading if it is acquired principally for the purpose of selling in the short term. Financial assets designated as at fair value through profit or loss at inception are those that are managed and their performances are evaluated on a fair value basis, in accordance with a documented investment strategy.

Assets in this category are classified as current assets if they are either held for trading or are expected to be realised within 12 months after the balance sheet date.

### (iii) Held-to-maturity financial assets

Held-to-maturity financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturities that the Group's management has the positive intention and ability to hold to maturity. If the Group were to sell other than an insignificant amount of held-to-maturity financial assets, the whole category would be tainted and reclassified as available-for-sale. They are presented as non-current assets, except for those maturing within 12 months after the balance sheet date which are presented as current assets.

### (b) Recognition and derecognition

The Group initially recognises loans and receivables and deposits on the date that they are originated. All other financial assets (including assets designated at fair value through profit or loss) are recognised initially on the trade date, which is the date that the Group becomes a party to the contractual provisions of the instrument.

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. On disposal of a financial asset, the difference between the carrying amount and the sale proceeds is recognised in profit or loss.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.17 Financial assets (continued)

### (c) Initial measurement

Financial assets are initially recognised at fair value plus transaction costs, except for financial assets at fair value through profit or loss, which are recognised at fair value. Transaction costs for financial assets at fair value through profit or loss are recognised immediately as expenses.

### (d) Subsequent measurement

Financial assets, at fair value through profit or loss are subsequently carried at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

Changes in the fair value of financial asset at fair value through profit or loss are recognised in income or expenditure within "other gains/(losses) – net" when the changes arise.

### (e) Impairment

The Group assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired and recognises an allowance for impairment when such evidence exists.

Loans and receivables/Held-to-maturity financial assets

Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default or significant delay in payments are objective evidence that these financial assets are impaired.

The carrying amount of these assets is reduced through the use of an impairment allowance account which is calculated as the difference between the carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. When the asset becomes uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are recognised against the same line item in profit or loss.

The impairment allowance is reduced through profit or loss in a subsequent period when the amount of impairment loss decreases and the related decrease can be objectively measured. The carrying amount of the asset previously impaired is increased to the extent that the new carrying amount does not exceed the amortised cost had no impairment been recognised in prior periods.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.18 Trade and other payables

Trade and other payables represent liabilities for goods and services provided to the Group prior to the end of financial year which are unpaid. They are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

Trade and other payables are initially recognised at fair value, and subsequently carried at amortised cost using the effective interest method.

### 2.19 Fair value estimation of financial assets and liabilities

The fair values of financial instruments that are not traded in an active market are determined by using valuation techniques. The Group uses a variety of methods and makes assumptions that are based on market conditions existing at each balance sheet date. Where appropriate, quoted market prices or dealer quotes for similar instruments are used.

The fair values of financial liabilities carried at amortised cost are estimated by discounting the future contractual cash flows at the current market interest rates that are available to the Group for similar financial liabilities.

Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- 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. as 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).

### 2.20 Cash and cash equivalents

The Board is required to participate in the Centralised Liquidity Management Framework ("CLM") in accordance with the Accountant-General's Circular No.4/2009 dated 2 November 2009. All selected bank accounts of the Board maintained with selected banks are linked up with the Accountant-General's Department's ("AGD") bank accounts for available excess cash to be automatically aggregated for central management on a daily basis. The deposits held with AGD are short-term highly liquid investments that are readily convertible to known amounts of cash and are classified in cash and cash equivalents as "Deposits held with AGD".

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.20 Cash and cash equivalents (continued)

Cash at bank and on hand represents funds that are derived from non-government sources/entities, which are not required to be included in the CLM.

For the purpose of presentation in the consolidated statement of cash flows, cash and cash equivalents include cash on hand and at bank, deposits held with AGD and deposits with financial institutions which are subject to an insignificant risk of change in value. Bank deposits with maturity over three months are excluded in the statement of cash flows.

### 2.21 Leases

(a) When the Group is the lessee:

The Group and the Board lease land and office equipment under operating leases from non-related parties.

Lessee - Operating leases

Leases of land where substantially all risks and rewards incidental to ownership are retained by the lessors are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessors) are recognised in profit or loss on a straight-line basis over the period of the lease.

Contingent rents are recognised as an expense in profit or loss when incurred.

### (b) When the Group is the lessor:

The Group and the Board lease retail space under operating leases to non-related parties.

Lessor - Operating leases

Leases of retail space where the Group retains substantially all risks and rewards incidental to ownership are classified as operating leases. Rental income from operating leases (net of any incentives given to the lessees) is recognised in profit or loss on a straight-line basis over the lease term.

Initial direct costs incurred by the Group in negotiating and arranging operating leases are added to the carrying amount of the leased assets and recognised as an expense in profit or loss over the lease term on the same basis as the lease income.

Contingent rents are recognised as income in profit or loss when earned.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 2. Significant accounting policies (continued)

### 2.22 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

### 2.23 Currency translation

(a) Functional and presentation currency

Items included in the financial statements of each entity in the Group are measured using the currency of the primary economic environment in which the entity operates ("functional currency"). The financial statements are presented in Singapore Dollars, which is the functional currency of the Board.

### (b) Transactions and balances

Transactions in a currency other than functional currency ("foreign currency") are translated into functional currency using the exchange rates at the dates of the transactions. Currency translation differences resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at the closing rates at the balance sheet date are recognised in profit or loss.

Foreign exchange gains and losses impacting profit or loss are presented in the income statement within "other (losses)/gains – net".

### 2.24 Dividends

Dividends are recognised when the dividends are approved for payment to the Ministry of Finance under the Capital Management Framework - Finance Circular Minute No. M26/2008.

### 2.25 Share capital

Ordinary shares to the Minister for Finance are classified as equity.

### 2.26 Capital account

The Capital account represents the grant given by the MOE to contribute towards the repayment of the outstanding accumulated interest on a Government loan taken.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 3. Critical accounting estimates, assumptions and judgements

Estimates, assumptions and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

### 3.1 Critical accounting estimates and assumptions

Depreciation of property, plant and equipment

Property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives, after taking into account the estimated residual value. The Group reviews the estimated useful lives of the assets regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and taking into account anticipated technological changes. Depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

### 3.2 Critical judgements in applying the entity's accounting policies

Held-to-maturity financial assets

The Endowment Fund follows the guidance of SB-FRS 39 on classifying non-derivative financial assets with fixed or determinable payments and fixed maturity as held-to-maturity financial assets. This classification requires significant judgement. In making this judgement, the Endowment Fund evaluates its intention and ability to hold such investments to maturity. If the Endowment Fund fails to hold these investments to maturity other than for the specific circumstances, for example, selling an insignificant amount close to maturity, it will be required to reclassify the entire class as available-for-sale. The investment would therefore be measured at fair value and no longer at amortised cost.

### 4. Other income

	Group		<u>Bo</u>	<u>ard</u>
	2018	2017	2018	2017
	\$	\$	\$	\$
Donations and sponsorship	999,541	1,119,330	999,541	1,119,330
Rental income	934,246	964,491	889,246	866,435
Interest income	266,280	188,810	266,280	188,810
Management fee	776,500	671,293	872,960	769,053
Others	153,717	129,911	105,836	87,041
	3,130,284	3,073,835	3,133,863	3,030,669
		· · · · · · · · · · · · · · · · · · ·		

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2017

### 5. Other gains – net

	Group and Board	
	2018	2017
	\$	\$
Fair value changes on financial asset		
at fair value through profit or loss	88,803	156,538
Net currency translation losses	(488)	(69)
•	88,315	156,469

### 6. Employee compensation

	Group		<u>Board</u>	
	2018	2017	2018	2017
	\$	\$	\$	\$
Wages and salaries Employer's contribution to Central	17,694,090	18,320,929	16,492,577	17,305,126
Provident Fund	2,934,489	2,971,367	2,787,815	2,842,461
Other staff benefits	316,555	359,091	310,898	354,857
	20,945,134	21,651,387	19,591,290	20,502,444

### 7. Other expenditure

	Gro	oup	Boa	ard
	2018	2017	2018	2017
	\$	\$	\$	\$
Professional, consultancy and other fees				
- subsidiaries	-	-	625,600	234,500
- non-related parties	863,612	846,566	763,910	724,869
Cost of merchandise and				
publications	667,536	545,589	460,889	314,248
Printing, stationery and office				
supplies	146,359	167,579	133,670	146,886
Rental of equipment and venue and				
lease fees of films	455,653	317,746	181,183	132,811
Postage, telephone and courier				
charges	89,991	86,502	69,483	75,161
Loss on disposal of property, plant				
and equipment	6,254	4,779	6,254	4,779
Transport and travelling expenses	424,251	731,851	386,385	705,290
Refreshment and entertainment				
expenses	177,258	148,608	176,530	149,605
Property tax	119,903	121,304	119,903	121,304
GST input tax (non-claimable)	1,140,685	963,989	1,140,685	963,989
Royalties	36,483	203,059	36,483	203,059
Others	243,360	269,886	140,965	71,545
	4,371,345	4,407,458	4,241,940	3,848,046

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 8. Finance expenses

	Group and Board	
	2018	2017
	\$	\$
Interest expenses – others	1,880	_
Interest expenses – borrowing	-	586
,	1,880	586

### 9. Income taxes

### (a) Income tax expense

	<u>Group</u>	
	2018	2017
	\$	\$
Tax expense attributable to (deficit)/surplus is made up of:		
- Current income tax	-	7,541
- Deferred income tax (Note 20)	15,288	(3,824)
	15,288	3,717
Under/(over) provision in preceding financial years		
- Current income tax	2,751	(616)
- Deferred income tax (Note 20)	(22,513)	
	(19,762)	(616)
Income tax (credit)/expense	(4,474)	3,101

The tax expense on the Group's results differs from the theoretical amount that would arise using the Singapore standard rate of income tax as follows:

	<u>Grou</u> <b>2018</b> \$	<u>յր</u> 2017 \$
Surplus before tax	1,127,199	131,691
Tax credit calculated at a tax rate of 17% (2017: 17%) Effects of:	191,624	22,387
- Surplus of the Board exempted from tax	(214,609)	(76,716)
- Statutory stepped income exemption	-	(23,472)
- Expenses not deductible for tax purposes	14,294	44,835
- Income not subject to tax	(7,486)	(6,509)
- Deferred tax assets not recognised	32,953	40,771
- Overprovision in preceding financial years	(19,762)	(616)
- Others	(1,488)	2,421
Income tax (credit)/expense	(4,474)	3,101

As a statutory board, the Board is exempted from income tax.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### Income taxes (continued)

### (a) Income tax expense (continued)

Deferred income tax assets are recognised for tax losses and capital allowances carried forward only to the extent that realisation of the related tax benefits through the future taxable profits is probable. Deferred tax assets have not been recognised in respect of tax losses and deductible temporary difference amounting to approximately \$816,859 (2017: \$750,724) and \$127,706 (2017: \$Nil), respectively, because it is not probable that future taxable profit will be available against which the Group can use the benefits therefrom.

### (b) Movements in current income tax liabilities

	Group	
	2018	2017
	\$	\$
Beginning of financial year	7,541	620
Income tax paid	(10,292)	(472)
Provision for the financial year	-	7,541
Over/(under) provision in preceding financial years	2,751	(148)
End of financial year	-	7,541

### 10. Cash and cash equivalents

	Group		Board	
	2018	2017	2018	2017
	\$	\$	\$	\$
Deposits held with AGD	23,071,543	21,241,056	23,071,543	21,241,056
Cash at bank and on hand	4,553,395	1,904,639	3,875,879	1,174,063
Short term bank deposits	1,000,000	1,000,000	1,000,000	1,000,000
·	28,624,938	24,145,695	27,947,422	23,415,119

For the purpose of presenting the consolidated cash flow statement, the consolidated cash and cash equivalents comprise the following:

	2018 \$	2017 \$
Cash and cash equivalents (as above)	28,624,938	24,145,695
Less: Short term bank deposits with maturity of more than 3 months	(1,000,000)	(1,000,000)
Cash and cash equivalents per consolidated cash flow statement	27,624,938	23,145,695

Short term bank deposits at the balance sheet date bear average effective interest rate of 1.22% (2017: 1.18% to 1.7%) and have a tenure of 6 months (2017: 6 months to 12 months).

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 10. Cash and cash equivalents (continued)

Deposits held with the Accountant-General's Department ("AGD") earn interest based on fixed deposit rates determined by financial institutions with which AGD deposits the monies.

### 11. Trade and other receivables

	<u>Group</u>		Boa	<u>ard</u>
	2018	2017	2018	2017
	\$	\$	\$	\$
Trade receivables				
- subsidiaries	-	-	135,722	257,705
- external parties	2,432,085	1,295,143	2,378,143	1,125,156
Trade receivables - net	2,432,085	1,295,143	2,513,865	1,382,861
Non-trade receivables from				
subsidiary	-	-	3,881	3,881
Sponsorship receivables	96,740	183,895	96,740	183,895
Other government grants receivable				
(see below)	92,121	1,912,158	92,121	1,912,158
Government grant receivable	329,338	-	329,338	
Deposits	23,698	15,555	-	1,000
Prepayments	163,692	219,649	141,819	190,563
Other receivables	286,395	47,718	274,519	41,222
	3,424,069	3,674,118	3,452,283	3,175,580

Other government grants refer to grants received from Ministries, Organs of States and other Statutory Boards.

### Other government grants

	Group		<u>Board</u>	
	2018	2017	2018	2017
	\$	\$	\$	\$
Other government grants receivable Other government grants received in	92,121	1,912,158	92,121	1,912,158
advance	(1,990,216)	(725,188)	(1,990,216)	(725,188)
	(1,898,095)	1,186,970	(1,898,095)	1,186,970

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 11. Trade and other receivables (continued)

Other government grants (continued)

Movement in other government grants receivable/(received in advance) is as follows:

### Group

	Receivable .		Received i	n advance	<u>Total</u>		
	2018	2017	2018	2017	2018	2017	
	\$	\$	\$	\$	\$	\$	
Beginning of financial			(man (aa)	// aan aan	4 400 070	200 110	
year	1,912,158	2,550,272	(725,188)	(1,669,829)	1,186,970	880,443	
Less: Grants received during the year	(1,905,457)	(965,100)	(4,494,505)	(1,011,267)	(6,399,962)	(1,976,367)	
Add: Amount recognised		, , ,					
in profit or loss	85,420	323,864	3,014,038	743,691	3,099,458	1,067,555	
Add: Amount transferred to deferred capital							
grants (Note 21)	-	2,969	6,376	134,873	6,376	137,842	
Less: Amount returned	-	153	160,103	1,162,360	160,103	1,162,513	
Add/less: Others		-	48,960	(85,016)	48,960	(85,016)	
End of financial year	92,121	1,912,158	(1,990,216)	(725,188)	(1,898,095)	1,186,970	

### Board

Receivable		Received i	Received in advance		tal_
2018	2017	2018	2017	2018	2017
\$	\$	\$	\$	\$	\$
1,912,158	2,447,879	(725,188)	(1,669,829)	1,186,970	778,050
/4 00W 4WW)	(000 707)	(4 454 005)	(0.40,000)	(0.070.744)	(4 000 070)
(1,905,457)	(862,707)	(4,4/1,28/)	(946,969)	(6,376,744)	(1,809,676)
85,420	323,864	2,990,820	731,743	3,076,240	1,055,607
•	•	, ,	•	, ,	
			00.500	0.070	05.400
-	•				85,492
~	153	160,103	1,162,360	160,103	1,162,513
_	-	48,960	(85,016)	48,960	(85,016)
92,121	1,912,158	(1,990,216)	(725,188)	(1,898,095)	1,186,970
	2018 \$ 1,912,158 (1,905,457) 85,420	2018 2017 \$ 2017 \$ 1,912,158 2,447,879 (1,905,457) (862,707) 85,420 323,864 - 2,969 - 153 	2018 2017 2018 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2018 2017 2018 2017 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2018 2017 2018 2017 2018 \$ \$ \$ \$ \$ \$ \$ \$  1,912,158 2,447,879 (725,188) (1,669,829) 1,186,970 (1,905,457) (862,707) (4,471,287) (946,969) (6,376,744)   85,420 323,864 2,990,820 731,743 3,076,240   - 2,969 6,376 82,523 6,376 - 153 160,103 1,162,360 160,103 - 48,960 (85,016) 48,960

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 12. Financial asset at fair value through profit or loss

Group and Board 2018 2017 \$ \$

Fullerton Conservative Balanced Fund ("Fullerton Fund")

**4,317,805** 4,229,002

The Fullerton Fund has a nominal value amounting to \$3,900,000 (2017: \$3,900,000).

The fair value of the Fullerton Fund is provided by the Fund Manager and determined based on estimated valuations derived from market quotations and are within level 2 of the fair value hierarchy.

Changes in the fair value of the financial asset at fair value through profit or loss amounting to \$88,803 (2017: \$156,496) have been included in the statement of comprehensive income for the year.

### 13. Held-to-maturity financial assets

	<u>Group a</u> <b>2018</b> \$	<u>nd Board</u> 2017 \$
Quoted corporate bonds, at amortised cost	1,018,000	2,020,500
Classified as: - Current - Non-current	1,018,000	1,002,500 1,018,000
	1,018,000	2,020,500

The quoted corporate bonds have nominal value amounting to \$1,000,000 (2017: \$2,000,000), with coupon rates of 2.58% (2016: 1.23% to 2.58%) per annum and matures on 24 September 2020 (2017: 30 January 2018 to 24 September 2020). The average effective interest rate of the quoted corporate bonds is 2.17% (2017: 1.18% to 2.17%). All the bonds carry a fixed coupon rate.

The fair values of the bonds are provided by banks employing generally market accepted valuation parameters and techniques. The quoted corporate bonds have fair values amounting to \$999,000 (2017: \$1,993,900) and are within level 2 of the fair value hierarchy.

### 14. Inventories

	Group		<u>Board</u>	
	2018	2017	2018	2017
	\$	\$	\$	\$
Finished goods	397,173	575,750	168,579	205,302

Inventories comprised finished goods held at cost for resale purposes.

The cost of inventories recognised as an expense and included in "Other expenditure" amounts to \$667,536 (2017: \$545,589) for the Group and \$460,805 (2017: \$292,788) for the Board.

At 31 March 2018, the write-down of inventories to net realisable value by the Group and Board amounted to \$40,270 (2017: \$68,572) and \$2,010 (2017: \$2,143) respectively.

### 15. Investments in subsidiaries

2018 Board 2017 \$

Unquoted equity investments at cost

**1,760,002** 1,760,002

Details of the subsidiaries are as follows:

Name of companies	Principal activities	Country of business/ incorporation	Equ hold <b>2018</b> %	
Singapore Science Centre Global <sup>(a)</sup>	Investment holding, marketing and promotional activities for related entities and participation in joint ventures and collaboration projects, with educational and entertainment elements, on an academic and commercial basis.	Singapore	100	100
Snow Venture Pte Ltd (a)	Proprietor and operator of entertainment centre	Singapore	100	100

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

## SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

NOTES TO THE FINANCIAL STATEMENTS For the financial year ended 31 March 2017

16. Property, plant and equipment

87,171,503 1,279,179 (1,523,284) 62,040,804 3,774,877 (1,517,030) 64,298,651 86,927,398 22,628,747 Assets under construction \$ (112,655) 2,660 112,655 2,660 OMNIMAX films \$ 602,594 602,594 602,594 268,315 258,107 3,261 268,315 Motor vehicles \$ 17,822,049 331,359 (1,523,284) 112,655 16,742,779 Furniture and office equipment \$ 2,486,239 Leasehold improvements 21,869,918 945,160 18,940,723 1,275,019 20,215,742 2,599,336 26,556,594 1,085,297 42,740,996 ,641,891 15,099,105 Buildings \$ 1,284,140 36,376 3,754,976 1,320,516 Leasehold <u>land</u> \$ 2,434,460 Cost
Beginning of financial year
Additions
Disposals
Reclassifications
End of financial year Accumulated depreciation Beginning of financial year Depreciation charge *Net book value* End of financial year End of financial year

NOTES TO THE FINANCIAL STATEMENTS For the financial year ended 31 March 2018

### Property, plant and equipment (continued) 16.

Group (continued)

Total \$	86,772,817	683,764 (285,078)	1	87,171,503	58,184,373	4,136,730 (280,299)	62,040,804	25,130,699
Assets under construction \$	131,305	61,081	(79,731)	112,655	ı	1 1	The state of the s	112,655
OMNIMAX films \$	602,594		•	602,594	602,594	! 1	602,594	ı
Motor vehicles \$	268,315		1	268,315	253,883	4,224	258,107	10,208
Furniture and office equipment	17,521,906	505,490 (285,078)	79,731	17,822,049	13.238.091	1,440,854 (280,299)	14,398,646	3,423,403
Leasehold improvements \$	21,752,725	117,193	•	21,869,918	17.371.285	1,569,438	18,940,723	2,929,195
Buildings \$	42,740,996		ı	42,740,996	25.470.757	1,085,837	26,556,594	16,184,402
Leasehold <u>land</u> \$	3,754,976		1	3,754,976	1.247.763	36,377	1,284,140	2,470,836
	2017 Cost Beginning of financial year	Additions Disposals	Reclassifications	End of financial year	Accumulated depreciation Beginning of financial year	Depreciation charge Disposals	End of financial year	<i>Net book valu</i> e End of financial vear

# SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

NOTES TO THE FINANCIAL STATEMENTS For the financial year ended 31 March 2018

### Property, plant and equipment (continued) 16.

Board

41,478,610       20,466,578       17,250,249       268,315       602,594       112,655       83,933,977         -       910,265       203,100       -       -       2,660       1,116,025         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       112,655       -       -       (1,523,284)         -       11,060,135       14,275,602       258,107       602,594       -       60,111,381         -       1,060,135       1,015,833       1,240,028       3,261       -       -       (1,517,030)         -       -       (1,517,030)       -       -       (1,517,030)       -       -       (1,517,030)         -       -       -       -       -       -       -       -
910,265 203,100 - 2,660 - (1,523,284) (112,655) - 112,665 (112,655) 21,376,843 16,042,720 268,315 602,594 2,660 8 18,337,669 14,275,602 258,107 602,594 - 6 1,015,833 1,240,028 3,261 - 6 - (1,517,030) (1,517,030) - (1,517,030) (1,517,030) - (1,517,030) (1,517,030) - 2,023,341 2,044,120 6,947 - 2,660 2
- (1,523,284) (112,655) - 112,655 (112,655) 21,376,843 16,042,720 268,315 602,594 2,660 8 18,337,669 14,275,602 258,107 602,594 - 6 1,015,833 1,240,028 3,261 - 6 - (1,517,030) (1,517,030) - (1,517,030) (2,594 - 6) 2,023,341 2,044,120 6,947 - 2,660 2
21,376,843       16,042,720       268,315       602,594       2,660       8         18,337,669       14,275,602       258,107       602,594       -       602,594       -       602,594       -       602,594       -       -       602,594       -
21,376,843       16,042,720       268,315       602,594       2,660       8         18,337,669       14,275,602       258,107       602,594       -       -       602,594       -
18,337,669       14,275,602       258,107       602,594       -       602,594       -       602,594       -
18,337,669     14,275,602     258,107     602,594     -     6       1,015,833     1,240,028     3,261     -     -       -     (1,517,030)     -     -     -       19,353,502     13,998,600     261,368     602,594     -     6       2,023,341     2,044,120     6,947     -     2,660     2
1,015,833 1,240,028 3,261 (1,517,030) (1,517,030) (1,517,030) (1,9,353,502 13,998,600 261,368 602,594 - 6
- (1,517,030) (9,353,502 13,998,600 261,368 602,594 - 6
13,404     19,353,502     13,998,600     261,368     602,594     -       65,206     2,023,341     2,044,120     6,947     -     2,660
65,206 2,023,341 2,044,120 6,947 - 2,660
65,206 2,023,341 2,044,120 6,947 - 2,660

### NOTES TO THE FINANCIAL STATEMENTS For the financial year ended 31 March 2018

### Property, plant and equipment (continued) 16.

ion <u>Total</u> \$	05 83,571,644 81 644,711 - (282,378) 	55 83,933,977	- 56,689,756 - 3,699,224 - (277,599)	- 60,111,381 - 60,111,381 - 60,111,381
Assets under construction \$	131,305 61,081 -	112,655		112,655
OMNIMAX films \$	602,594	602,594	602,594	602,594
Motor vehicles \$	268,315	268,315	253,883 4,224	258,107
Furniture and office equipment	16,986,459 466,437 (282,378) 79,731	17,250,249	13,244,298 1,308,903 (277,599)	14,275,602
Leasehold improvements \$	20,349,385	20,466,578	17,048,084	18,337,669
Buildings \$	41,478,610	41,478,610	24,293,134 1,060,135	1,284,140 25,353,269 2 470 836 16 125 341
Leasehold land \$	3,754,976	3,754,976	1,247,763 36,377	1,284,140
	Cost Beginning of financial year Additions Disposals	End of financial year	Accumulated depreciation Beginning of financial year Depreciation charge Disposals	End of financial year  Net book value End of financial year

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2017

38

### Government grants received in advance

	<b>Group and Board</b>	
	2018	2017
	\$	\$
Beginning of financial year	10,153,612	7,360,788
Add: Grants received during the year	33,326,731	33,066,028
Less: Amount transferred to deferred capital grants (Note 21)	(75,565)	(120,266)
Less: Amount recognised in profit or loss	(32,200,552)	(30,152,938)
End of financial year	11,204,226	10,153,612

### Sponsorship received in advance

	2018 \$	2017 \$
Beginning of financial year	888,850	506,115
Add: Sponsorship granted during the year	876,322	1,515,371
Less: Amount transferred to deferred capital grants (Note 21)	(3,475)	(13,306)
Less: Amount recognised in profit or loss	(999,541)	(1,119,330)
End of financial year	762,156	888,850

### Trade and other payables

	Group		Boa	ard
	2018	2017	2018	2017
	\$	\$	\$	\$
Trade payables to				
- external parties	998,157	810,119	855,306	681,454
- subsidiaries		-	134,830	5,701
	998,157	810,119	990,136	687,155
Non-trade payables to				
<ul> <li>non-related parties</li> </ul>	1,084,292	2,631,525	1,082,491	2,624,561
<ul> <li>other government agency</li> </ul>	145,548	280,998	118,536	282,952
- subsidiaries	-	-	92,623	11,220
Other payables	60,977	-	-	-
Deposits received	190,863	195,598	206,253	213,106
Deferred income	387,471	589,557	227,574	243,901
Other accruals for operating				
expenses	2,073,749	2,515,125	1,956,337	2,407,783
	4,941,057	7,022,922	4,673,950	6,470,678

Non-trade payables to subsidiaries are unsecured, interest-free and repayable on demand.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 20. Deferred income taxes

	Group		
	2018	2017	
	<b>J</b>	Ψ	
Beginning of financial year	55,478	59,302	
Tax charged to profit or loss (Note 9(a))	(7,225)	(3,824)	
End of financial year	48,253	55,478	

The movement in deferred income tax liabilities during the financial year is as follows:

### Deferred income tax liabilities

2018	Accelerated tax depreciation \$	<u>Total</u> \$
	55,478	55,478
Beginning of financial year Tax charged to profit or loss	(7,225)	(7,225)
End of financial year	48,253	48,253
End of imancial year	70,200	40,200
2017		
Beginning of financial year	59,302	59,302
Tax charged to profit or loss	(3,824)	(3,824)
End of financial year	55,478	55,478

### 21. Deferred capital grants

### Group

Gloup						
	Gover	nment	Oth	ners	To	otal
	2018	2017	2018	2017	2018	2017
	\$	\$	\$	\$	\$	\$
	•	,	•	-		
Beginning of financial						
year	16,918,592	17.855.653	351,379	386,400	17,269,971	18,242,053
Add: Transferred from			•	,	, ,	, ,
- government grants						
(Note 17)	75,565	120,266	_	-	75,565	120,266
- other government	,	,			•	,
grants (Note 11)	-	_	6,376	137,842	6,376	137,842
- sponsorship (Note 18)	-	_	3,475	13,306	3,475	13,306
Less: Amount recognised			-,	;	•	•
in profit or loss	(1,086,019)	(1,057,327)	(152,446)	(186,169)	(1,238,465)	(1,243,496)
End of financial year	15,908,138	16,918,592	208,784	351,379	16,116,922	17,269,971
					***************************************	
Total deferred capital						
grants received						
(included in						
government grants						
received) since						
inception of the Board	74,501,959	74,426,394	13,828,950	13,819,099	88,330,909	88,245,493
inception of the board	177,001,000	14,420,034	10,020,000	10,010,000	00,000,000	00,270,400

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2017

### 21. Deferred capital grants (continued)

### **Board**

	Gove	rnment	<u>Oth</u>	<u>ners</u>	<u>To</u>	<u>otal</u>
	2018	2017	2018	2017	2018	2017
	\$	\$	\$	\$	\$	\$
Beginning of financial year Add: Transferred from - government grants	16,918,592	17,855,653	229,339	278,420	17,147,931	18,134,073
(Note 17) - other government	75,565	120,266	-	-	75,565	120,266
grants (Note 11)	-	-	6,376	85,492	6,376	85,492
- sponsorship (Note 18)	-	-	3,475	13,306	3,475	13,306
Less: Amount recognised						
in profit or loss	(1,053,489)	(1,057,327)	(152,446)	(147,879)	(1,205,935)	(1,205,206)
End of financial year	15,940,668	16,918,592	86,744	229,339	16,027,412	17,147,931
Total deferred capital grants received (included in government grants received) since inception of the Board	74,501,959	74,426,394	13.635.007	13.625.156	88.136.966	88.051.550

### 22. Capital account

The Board's capital account represents:

- (a) the grant of \$1,640,347 given by the MOE in the financial year 1993/94 to contribute towards the repayment of the outstanding accumulated interest on a Government loan taken in 1984 for the purchase of a piece of leasehold land for the Omni-Theatre; and
- (b) the conversion of a Government loan and the related outstanding accumulated interest amounting to \$1,339,636. The loan was utilised by the Board in 1988 to finance the building of the Omni-Theatre. The conversion of the loan and outstanding accumulated interest to capital was approved by the Ministry of Finance in the financial year ended 31 March 2001.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 23. Share capital

	Group and Board		
	<b>2018</b> 20		
	\$	\$	
Beginning of financial year	6,969,710	6,165,076	
Issue of new shares	989,620	804,634	
End of financial year	7,959,330	6,969,710	

For the year ended 31 March 2018, the Board issued 989,620 (2017: 804,634) ordinary shares for a total consideration of \$989,620 (2017: \$804,634) as part of the Capital Management Framework for Statutory Boards under Finance Circular Minute M26/2008. The shares are fully paid and are held by the Minister for Finance, a body corporate incorporated by the Minister for Finance (Incorporation) Act (Chapter 183).

The holders of these shares are entitled to receive dividends as and when declared by the Board. The shares carry neither voting rights nor par value.

### 24. Restricted funds

Restricted funds comprise of the Sponsorship Fund and the Endowment Fund:

### Statement of Comprehensive Income - Restricted Funds

Board	Sponsorship	Endowment	Total
	\$	\$	\$
2018 Other income Expenses	1,007,069 (1,004,141)	134,556 (48,253)	1,141,625 (1,052,394)
Net surplus for the year Accumulated surplus brought forward	2,928	86,303	89,231
	77,884	7,324,002	7,401,886
Accumulated surplus carried forward	80,812	7,410,305	7,491,117
2017			
Other income	1,122,261	206,077	1,328,338
Expenses	(1,120,466)	(49,539)	(1,170,005)
Net surplus for the year Accumulated surplus brought forward	1,795	156,538	158,333
	76,089	7,167,464	7,243,553
Accumulated surplus carried forward	77,884	7,324,002	7,401,886

Sponsorship income relates to expenditure incurred which will be subsequently reimbursed by the sponsors of the events. The amount reimbursable is correspondingly recorded as sponsorship receivables under trade and other receivables (Note 11).

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### **NOTES TO THE FINANCIAL STATEMENTS**

For the financial year ended 31 March 2018

### 24. Restricted funds (continued)

### Balance Sheet - Restricted Funds

Board	Sponsorship \$	Endowment \$	<u>Total</u> \$
2018 ASSETS Current assets	*	*	*
Cash and cash equivalents	2,155,343	2,120,592	4,275,935
Trade receivables	93,178	-,,	93,178
Other receivables	4,755	2,526	7,281
Sponsorship receivable (Note 11) Financial asset at fair value through profit or	96,740	-	96,740
loss (Note 12)	-	4,317,805	4,317,805
	2,350,016	6,440,923	8,790,939
Non-current assets	· ·		
Held-to-maturity financial assets (Note 13)	-	1,018,000	1,018,000
Property, plant and equipment	11,003	-	11,003
	11,003	1,018,000	1,029,003
Total assets	2,361,019	7,458,923	9,819,942
LIABILITIES Current liabilities			
Trade and other payables	1,507,048	48,618	1,555,666
Sponsorship received in advance (Note 18)	762,156	-	762 <u>,156</u>
	2,269,204	48,618	2,317,822
Non-current liabilities			
Deferred capital grants	11,003	-	11,003
	11,003	-	11,003
Total liabilities	2,280,207	48,618	2,328,825
NET ASSETS	80,812	7,410,305	7,491,117

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 24. Restricted funds (continued)

### Balance Sheet - Restricted Funds (continued)

Board 2017	Sponsorship \$	Endowment \$	Total \$
ASSETS			
Current assets			
Cash and cash equivalents	684,439	1,119,444	1,803,883
Trade receivables	94,913	4 040	94,913
Other receivables Sponsorship receivable (Note 11)	136,460 183,895	4,618	141,078 183,895
Held-to-maturity financial assets (Note 13)	103,093	1,002,500	1,002,500
Financial asset at fair value through profit or		1,002,000	.,002,000
loss (Note 12)	-	4,229,002	4,229,002
	1,099,707	6,355,564	7,455,271
Non-current assets			
Held-to-maturity financial assets (Note 13)	-	1,018,000	1,018,000
Property, plant and equipment	12,128	-	12,128
	12,128	1,018,000	1,030,128
Total assets	1,111,835	7,373,564	8,485,399
LIABILITIES Current liabilities			
Trade and other payables	132,973	49,562	182,535
Sponsorship received in advance (Note 18)	888,850	10,002	888,850
	1,021,823	49,562	1,071,385
Non-current liabilities			MANUTURE TO A STATE OF THE STAT
Deferred capital grants	12,128		12,128
	12,128		12,128
Takal Biakilikiaa	4 000 054	40.500	4 000 E40
Total liabilities	1,033,951	49,562	1,083,513
NET ASSETS	77,884	7,324,002	7,401,886
	11,001	. 102 1,002	. 1 .0 :1000

### 25. Omni-Theatre Development Fund

The Omni-Theatre Development Fund was set up with contributions received from private organisations and individuals. The income of this fund is taken to the profit or loss and is used for:

- replacing the various specialised and highly technical projector systems and sound equipment;
- (ii) leasing of OMNIMAX movies; and
- (iii) producing Planetarium shows.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 25. Omni-Theatre Development Fund (continued)

	<u>Group an</u> <b>2018</b> \$	<u>d Board</u> 2017 \$
Beginning and end of financial year	122,780	122,780
Represented by: Cash at bank and on hand	122,780	122,780

### 26. Commitments

### (a) Operating lease commitments - where the Group is a lessee

The Group and the Board lease land and office equipment from non-related parties under non-cancellable operating lease agreements. The leases have varying terms, escalation clauses and renewal rights.

The future minimum lease payables under non-cancellable operating leases contracted for at the balance sheet date but not recognised as liabilities, are as follows:

	Group and Board	
	2018	2017
	\$	\$
Not later than one year	3,253	3,253
Between one and five years	4,337	7,554
Later than five years	1,731	1,767
•	9,321	12,574

### (b) Operating lease commitments - where the Group is a lessor

The Group and the Board lease out retail space to non-related parties under non-cancellable operating leases. The lessees are required to pay either absolute fixed annual increase to the lease payments or contingent rents computed based on their sales achieved during the lease period.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 26. Commitments (continued)

### (b) Operating lease commitments - where the Group is a lessor (continued)

The future minimum lease receivables under non-cancellable operating leases contracted for at the balance sheet date but not recognised as receivables, are as follows:

	Group		Board	
	2018	2017	2018	2017
	\$	\$	\$	\$
Not later than one year	264,745	422,341	348,745	501,341
Between one and five years	57,735	56,810	85,735	176,810
·	322,480	479,151	434,480	678,151

### 27. Financial risk management

### Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, price risk and interest rate risk), credit risk and liquidity risk.

The Board is responsible for setting the objectives and underlying principles of financial risk management for the Group. The Board then establishes detailed policies such as risk identification and measurement and exposure limits.

The information presented below is based on information received by the key management.

### (a) <u>Market risk</u>

### (i) Currency risk

The Group has no significant exposure to foreign currencies as its operations are substantially denominated in Singapore dollars, which is also its functional currency.

### (ii) Price risk

To manage its price risk arising from these investments, the Group manages its investment portfolio in accordance with investment guidelines and limits set by the Group for the portfolio. For its equity securities designated at fair value through profit or loss, the impact of a 5% increase in the fair value of the Fund at the reporting date on net surplus would have been an increase of \$215,890 (2017: \$211,450). An equal change in the opposite direction would have decrease net surplus by \$215,890 (2017: \$211,450).

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### **NOTES TO THE FINANCIAL STATEMENTS**

For the financial year ended 31 March 2018

### 27. Financial risk management (continued)

### (a) Market risk (continued)

### (iii) Interest rate risk

Interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Group's exposure to cash flow interest rate risk arises from interest-bearing assets consisting mainly of cash balances and fixed deposits maintained/managed by AGD. The cash balances and fixed deposits maintained/managed by AGD under centralised liquidity management are placed with high credit quality financial institution and are expected to move in tandem with market interest rate movements. The Group is not exposed to interest rate risk arising from held-to-maturity financial assets as the bonds carry a fixed coupon rate.

As the Group does not have other significant interest-bearing assets at floating rates, the Group's income is substantially independent of changes in market interest rates. Accordingly, no sensitivity analysis is presented. Information relating to the Group's interest rate exposure are disclosed in the respective notes to the financial statements.

### (b) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The major classes of financial assets of the Group are cash and cash equivalents, trade and other receivables, financial asset at fair value through profit or loss and held-to-maturity financial assets.

For trade receivables, the Group adopts the policy of dealing only with customers of appropriate credit history, and obtaining sufficient security where appropriate to mitigate credit risk. For other financial assets including deposits held with AGD, the Group adopts the policy of dealing only with high credit quality counterparties such as reputable financial institutions. Concentrations of credit risk with respect to trade receivables are limited due to the Group's large number of customers. Due to these factors, management believes that no additional credit risk beyond the amount of allowance for impairment made is inherent in the Group's trade receivables.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 27. Financial risk management (continued)

### (b) Credit risk (continued)

The maximum exposure to credit risk for each class of financial instruments is the carrying amount of that class of financial instruments presented on the balance sheet. The Group does not hold any collateral in respect of their financial assets.

The age analysis of trade receivables is as follows:

	Group		Board	
	<b>2018</b> 2017		2018	2017
	\$	\$	\$	\$
Current	1,243,760	607,869	1,310,833	698,705
Past due 0 to 2 months	1,067,452	517,302	1,088,772	514,184
Past due over 2 months	120,873	169,972	114,260	169,972
	2,432,085	1,295,143	2,513,865	1,382,861

### (i) Financial assets that are neither past due nor impaired

Cash and cash equivalents that are neither past due nor impaired are mainly deposits with banks with high credit-ratings assigned by international credit-rating agencies. Deposits held with AGD are available for withdrawal upon request from AGD. Trade and other receivables that are neither past due nor impaired are substantially institutions and companies with a good collection track record with the Group. For financial assets, the Group adopts the policy of dealing only with high credit quality counterparties.

### (ii) Financial assets that are past due and/or impaired

There is no other class of financial assets that is past due and/or impaired except for trade receivables. The age analysis of trade receivables past due but not impaired is set out above.

There is no allowance for doubtful debts rising from these outstanding balances. The Board believes that the past due amounts are still collectible in full, based on historical payment behaviour and analysis of debtors' credit risk.

### (c) Liquidity risk

Liquidity risk is the risk that the Board will not be able to meet its financial obligations as and when they fall due. The Board's approach to maintain liquidity is to ensure sufficient funding from the government and other government agencies and maintains a level of cash and cash equivalents deemed adequate by management to finance its operations.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 27. Financial risk management (continued)

### (c) Liquidity risk (continued)

The table below analyses non-derivative financial liabilities of the Group and the Board into relevant maturity groupings based on the remaining period from the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

	<b>2018</b> \$	2017 \$
Group	Ψ	Ψ
Trade and other payables	4,553,586	6,433,365
<ul><li>Less than 1 year</li><li>Between 1 and 5 years</li></ul>	4,555,566 25,407	0,433,305 
	4,578,993	6,433,365
Board		
Trade and other payables		
- Less than 1 year	4,446,376	6,226,777

### (d) Capital risk

The Board's objectives when managing capital are to ensure that the Board is adequately capitalised and to fulfill objectives for which monies of the Board may be applied under the Act. To achieve these objectives, the Board may secure grants from Government or other government agencies, return as capital to shareholders, issue new shares, or obtain new borrowings.

The Board is not subject to any capital requirements under the Act or any other externally imposed capital requirements, except for those mandated by the Ministry of Finance.

The Board defines capital as share capital, capital account, funds and accumulated surplus. The Board monitors its net surplus/deficits. The Board's approach to capital management remains unchanged from the previous financial year ended 31 March 2017.

### (e) Fair values

### Financial assets

Information on the determination of fair values of financial assets at fair value through profit or loss and held-to-maturity has been separately disclosed in Notes 12 and 13.

In 2018 and 2017, there were no transfers between the different levels of the fair value hierarchy.

### Other financial assets and liabilities

The carrying values of other financial assets and liabilities with a maturity of less than one year (including trade and other receivables, cash and cash equivalents, and trade and other payables) are assumed to approximate their fair values because of the short period to maturity.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 27. Financial risk management (continued)

### (f) Financial instruments by category

The aggregate carrying amount of loans and receivables and financial liabilities at amortised cost are as follows:

	Group		Board	
	2018	2017	2018	2017
	\$	\$	\$	\$
Loans and receivables Financial assets, at fair value	31,885,315	27,600,164	31,257,886	26,400,136
through profit or loss	4,317,805	4,229,002	4,317,805	4,229,002
Held-to-maturity financial assets	1,018,000	2,020,500	1,018,000	2,020,500
Financial liabilities at amortised cost	(4,578,993)	(6,433,365)	(4,446,376)	(6,226,777)

### 28. Related party transactions

In addition to the information disclosed elsewhere in the financial statements, the following transactions took place between the Group and related parties at terms agreed between the parties:

### (a) Sales of goods and/or services to government

	Group	
	2018	2017
	\$	\$
Admission fees received from government Proceeds from special projects received from government Fees from courses and programmes from government Sales of merchandise and publications to government	30,657 9,397 189,396 3,559	21,050 24,060 191,164 3,352

### (b) Donations and sponsorships

	Group	
	2018 \$	2017 \$
Donations and sponsorships from other government agencies	43.771	16.521
agendes		10,021

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 28. Related party transactions (continued)

### (c) Key management personnel compensation

Key management personnel compensation is as follows:

	Group		Roard	
	2018	2017	2018	2017
	\$	\$	\$	\$
Wages and salaries Post-employment benefits	1,062,559	1,278,338	935,370	1,151,451
- contributions to CPF	73,113	79,701	59,720	65,654
	1,135,672	1,358,039	995,090	1,217,105

### 29. New or revised accounting standards and interpretations

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after 1 April 2018, and have not been applied in preparing these financial statements.

These new standards include, among others, SB-FRS 115 Revenue from Contracts with Customers and SB-FRS 109 Financial Instruments which are mandatory for adoption by the Group on 1 April 2018.

SB-FRS 115 Revenue from Contracts with Customers

SB-FRS 115 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It also introduces new cost guidance which requires certain costs of obtaining and fulfilling contracts to be recognised as separate assets when specific criteria are met.

The Group plans to adopt SB-FRS 115 in its financial statements for the year ending 31 March 2019, using the retrospective approach. As a result, the Group will apply all of the requirements of SB-FRS 115 retrospectively, and the comparative period presented in the 2019 financial statements will be restated.

Based on the Group's existing revenue arrangement, the Group expects its revenue stream to constitute a single performance obligation. As a result, the Group does not expect a significant impact on the timing of revenue recognition.

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 29. New or revised accounting standards and interpretations (continued)

SB-FRS 109 Financial Instruments

SB-FRS 109 contains new requirements for classification and measurement of financial instruments and a new expected credit loss model for calculating impairment of financial assets.

Changes in accounting policies resulting from the adoption of SB-FRS 109 will generally be applied by the Group retrospectively, except as described below.

- The following assessments have to be made on the basis of facts and circumstances that existed at 1 April 2018:
  - The determination of the business model within which a financial assets is held
  - The determination of whether contractual terms of a financial asset give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.
  - The designation of an investment in equity instruments that is not held for trading as at fair value through other comprehensive income (FVOCI).
  - The designation and revocation of previous designations of certain financial assets and financial liabilities measured at fair value through profit or loss (FVTPL).

The expected impact on adoption of SB-FRS 109 is not expected to be material.

Classification and measurement: financial assets

For financial assets currently held at fair value, the Group expects to continue measuring these assets at fair value under SB-FRS 109. For financial asset that have been designated at FVTPL, the Group expects to continue measuring these assets at FVTPL.

Impairment

SB-FRS 109 replaces the current 'incurred loss model' in SB-FRS 39 with a forward-looking 'expected credit loss' (ECL) model. The new impairment model will apply to financial assets measured at amortised cost, certain loan commitments and financial guarantee contracts.

The Group plans to apply the simplified approach and record lifetime ECL on all trade receivables and any contract assets arising from the application of SB-FRS 115. The Group does not expect a significant impact form the new impairment model.

The Group is currently finalising the assessment of its expected credit losses and the quantum of the final transition adjustments may be different upon finalisation.

### SCIENCE CENTRE BOARD AND ITS SUBSIDIARIES

### NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

### 29. New or revised accounting standards and interpretations (continued)

SB-FRS116 Leases

SB-FRS116 replaces existing lease accounting guidance. SB-FRS116 is effective for annual periods beginning on or after 1 April 2019, with early adoption permitted if SB-FRS 115 is also applied. SB-FRS116 eliminates the lessee's classification of leases as either operating leases or finance leases and introduces a single lessee accounting model. Applying the new model, a lessee is required to recognise right-of-use (ROU) assets and lease liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value.

The Group plans to adopt the standard when it becomes effective in 2019 and expects to apply the standard using the modified retrospective approach. The Group also expects the ROU assets recognised at date of initial application to be equal to their lease liabilities.

The Group is likely to elect the practical expedient not to reassess whether a contract contains a lease at the date of initial application, 1 April 2019. Accordingly, existing lease contracts that are still effective on 1 April 2019 continue to be accounted for as lease contracts under SB-FRS116. The Group has performed a preliminary assessment of the impact on its financial statements based on its existing operating lease arrangements.

Until 2018, the financial impact of the standard will be affected by factors that impact calculation of lease liabilities such as discount rate, expected term of leases including renewal options and exemptions for short-term leases. The Group will continue to assess its portfolio of leases to calculate the impending impact of transition to the new standard.

### (i) The Group as lessee

The Group expects its existing operating lease arrangements to be recognised as ROU assets with corresponding lease liabilities under SB-FRS116. The operating lease commitments on an undiscounted basis amount to approximately 0.5% of the consolidated total assets and 0.9% of consolidated total liabilities. Under the new standard, remaining lease payments of the operating leases will be recognised at their present value discounted using appropriate discount rate. In addition, the nature of expenses related to those leases will now change as SB-FRS116 replaces the straight-line operating lease expense with depreciation charge of ROU assets and interest expense on lease liabilities.

### (ii) The Group as lessor

SB-FRS116 substantially carries forward the current existing lessor accounting requirements. Accordingly, the Group continues to classify its leases as operating leases and to account for this type of leases using the existing operating lease. However, SB-FRS116 requires more extensive disclosures to be provided by a lessor.