For discussion on 19 December 2018

### Legislative Council Panel on Home Affairs

### Enhancement of Programming, Audience Building, and Renewal of Permanent Exhibitions of Hong Kong Science Museum

### Purpose

This paper updates Members on the audience building strategies, programming plans, and the progress and plans on renewal of permanent exhibition galleries of the Hong Kong Science Museum (HKScM) managed by the Leisure and Cultural Services Department (LCSD).

### Background

2. Opened in 1991, the HKScM is dedicated to promoting Science, Technology, Engineering and Mathematics (STEM) education among students and the general public, captivating the public's interest, curiosity and imagination through interactive exhibits, and providing enlightening programmes for a better understanding and a greater appreciation of the nature. To achieve its mission, the HKScM has been organising innovative and multi-disciplinary exhibitions, education activities and outreach programmes, many of which have won extensive recognition and received overwhelming responses, as proven by the record-breaking attendance of over 1.95 million visitors in the financial year 2017-18.

3. The Legislative Council Panel on Home Affairs was updated on 21 December 2017 vide LC Paper No. CB(2)553/17-18(03) regarding the measures to enhance public museum services, including the proposals to renew the permanent exhibitions of the HKScM. This paper reports the actions taken and plans on further enhancing the programming and audience building, and the renewal of permanent exhibition galleries of the HKScM.

### **Programming and Audience Building**

4. To promote science and technology, support STEM education and cultivate a wider audience base as promulgated in 2018 Policy Address, the HKScM is set to present a great variety of exhibitions and education programmes.

### Permanent Exhibitions

5. The HKScM has 16 permanent exhibition galleries occupying a total area of 6 500 m<sup>2</sup>. The list of the permanent exhibition galleries is at <u>Annex I</u>, and most of them were first developed some 15 years ago. To sustain the appeal to the public and to keep up with the latest scientific discoveries and technological advancements, the HKScM has started to renew its permanent exhibitions by phases -

Exhibition Gallery	Completion of
	<b>Renewal Works</b>
Biodiversity Gallery	Completed in 2016
Children's Gallery	Completed in 2017
Earth Science Gallery	2019
(to be converted from Occupation	
Safety and Health Gallery and Science	
News Corner)	
Palaeontology Gallery	2020
(to be converted from Life Sciences	
Gallery)	
Transportation Hall	2021
Home Technology Hall	2021
Food Science Hall	2021
InnoTech Gallery	2023
(to be converted from	
Telecommunication Gallery)	

6. Apart from renewing the permanent exhibition galleries as mentioned in paragraph 5 above, there is a pressing need for the HKScM to replace/upgrade selected exhibits in five permanent exhibition galleries, namely *Motion*, *Light*, *Sound*, *Electricity and Magnetism*, and

*Mathematics.* The HKScM is planning to launch a five-year programme to update the contents of the exhibitions, enhance the quality of the displays by deploying the latest technology, and to replace the worn out interactive exhibits that are beyond economical repair. The total funding required for enhancing the exhibits therein is estimated at \$20 million, which covers layout planning, researching, sourcing, prototyping, testing, fabrication and installation of new exhibits, and the cash flow requirement is at <u>Annex II</u>.

7. To enrich the visitors' experience and knowledge about the exhibits at the permanent exhibition halls, the HKScM has launched the *iM Guide*, a museum mobile multimedia platform, in 2018. With the use of indoor navigation technology, richer and be-spoke information on the exhibits will be provided to the visitors through audio, text, and multimedia means.

### Special Exhibitions

8. The HKScM is committed to staging high quality special exhibitions that create enriching and inspiring museum visitation experience through unique curatorial approaches, the use of modern technology and organisation of interactive activities. Apart from showcasing local science and technology, the HKScM has also staged blockbuster exhibitions by stepping up collaborations with worldrenowned museums and cultural institutions such as American Museum of Natural History, The British Museum, Natural History Museum in London, London Science Museum, Museum of Science and Industry in Manchester, and The Palace Museum. The major special exhibitions organised by the HKScM in the recent years are listed below. Among them, the Eternal Life - Exploring Ancient Egypt exhibition has registered a record-breaking attendance of over 850 000 visitors.

Exhibition	Period	Attendance
Animal Grossology	1 July – 2 November 2016	287 957
T-Rex Revealed – The	2 December 2016 –	239 254
Augmented + Virtual	1 March 2017	
Reality Experience		
Eternal Life – Exploring	2 June – 18 October 2017	854 045

Exhibition	Period	Attendance
Ancient Egypt		
Wonder Materials –	15 December 2017 –	128 500
Graphene and Beyond	18 April 2018	
Above and Beyond	15 June –	282 342
	17 October 2018	

9. The HKScM will continue to present special exhibitions focusing on different themes which attract young people and general public to get in touch with various science subjects and latest technologies. A list of major special exhibitions in 2019 is at <u>Annex III</u>.

#### Education and Extension Programmes

10. The HKScM is working closely with various scientific organisations, educational institutions and professional bodies to organise a wide variety of public programmes, such as fun science exploration programmes, field trips, public seminars and family workshops to arouse the public's interests in science and technology. A list of major education and extension programmes in 2019 is at <u>Annex IV</u>. Notable examples are the *Distinguished Chinese Scientists Lecture Series* and *Meets the Shaw Laureates Science Forum*, which are organised annually to provide a platform for young people to meet renowned scientists and to appreciate the challenges and interests of scientific work.

11. First initiated by the HKScM in 2014, the *Hong Kong SciFest* is an annual large-scale community event to enhance the public's interests in science and technology with a wide array of fun-filled activities such as carnivals, field visits, workshops, talks and competitions targeting young people and families. Within a short span of four years, SciFest has grown in scale and popularity from 19 to 91 partners, from 47 to 163 programmes, and with attendance soaring from around 201 000 to over 298 000 in 2018. Some local and non-local organisations have also expressed an interest in joining the festival. We will further expand the scale of this unique festival and create synergy by inviting more collaborators.

12. To promote the STEM education to local schools and nurture

young scientists, the HKScM has organised the annual *SciPOP Science Presentation Contest* since 2016. The winning students of the competition will join the *Young Scientists Study Tour* which offers an invaluable and unique opportunity for them to visit academic and research institutions in other places, and to participate in workshops or field trips related to latest scientific researches. In 2019, the HKScM will arrange visits to the renowned scientific institutions in Singapore.

13. In early 2018, the HKScM organised the first *Croucher Science Week* with the Croucher Foundation, aiming at stimulating participants' natural curiosity, teaching them scientific methods and encouraging them to ponder fundamental questions of science. Leading science communicators from around the world were invited to organise performances, workshops, and interactive lectures for students, teachers and the general public. Given its popularity, the HKScM will continue to organise this programme again in collaboration with the Croucher Foundation.

## **Advice Sought**

14. Members are invited to note and comment on the contents of this paper. Subject to Members' view, we will seek the necessary funding approval for replacing/upgrading the exhibits of the HKScM as mentioned in paragraph 6 above from the Legislative Council in accordance with established mechanism.

Home Affairs Bureau Leisure and Cultural Services Department December 2018

#### Annex I

### Permanent Exhibition Galleries of Hong Kong Science Museum

Exhibition Gallery	Service Year	No. of Exhibits
Life Science ^	27	80
Home Technology ^	27	19
Transportation ^	27	19
Food Science ^	27	18
Motion	27	4
Light	27	17
Sound	27	5
Electricity and Magnetism	19	46
Mathematics	14	42
Telecommunications ^	13	74
World of Mirrors	11	22
Jockey Club	8	75
Environmental Conservation Gallery		
Biodiversity #	2	140
Children's Gallery #	1	30
Occupational Safety and Health @ ^	-	-
Science News Corner @ ^	-	-
	Total	591

These galleries will be renewed/converted according to the schedule in paragraph 5 of the paper.

# The galleries have been recently renewed.

(a) The galleries are currently closed for renewal.

## Cash Flow Requirements for Replacing/Upgrading Selected Exhibits in the Motion, Light, Sound, Electricity and Magnetism, and Mathematics Exhibition Galleries in Hong Kong Science Museum

Financial Year	(\$'000)
2019-20	2,000
2020-21	4,500
2021-22	4,500
2022-23	4,500
2023-24	4,500
Total	20,000

# Major Special Exhibitions of Hong Kong Science Museum in 2019

Date	Exhibition
December 2018 – April 2019	Treasures of Time
June – October 2019	Winter Games (Tentative title)
December 2019 – April 2020	Inheriting the Culture – the Science and Skill of Conservation (Tentative title)

### Annex IV

# Major Education and Extension Programmes of Hong Kong Science Museum in 2019

Tentative Date	Programme	Venue
December 2018 –	SciPOP Science	Hong Kong Science
April 2019	Demonstration Contest	Museum
February 2019	Fun Science Competition	Hong Kong Science Museum
March – April 2019	Hong Kong Student Science Project Competition	Hong Kong Science Park
April 2019	Croucher Science Week	Hong Kong Science Museum and local schools
April 2019	HK SciFest	Hong Kong Science Museum and partners' venues
May 2019	Robotic Olympiad	Hong Kong Science Museum
May 2019	Primary STEM Project Exhibition	Hong Kong Central Library
July 2019	Robotics Intelligence DIY Competition	Hong Kong Central Library
July 2019	Young Scientists Study Tour	Singapore
July – December 2019	Science in the Public Service	Hong Kong Science Museum and partners' venue
August 2019	Joint School Science Exhibition	Hong Kong Central Library
September 2019	Meet the Shaw Laureates Science Forum	Hong Kong Science Museum
September – November 2019	The Shaw Prize Exhibition	Hong Kong Science Museum
November 2019	Distinguished Chinese Scientists Lecture Series	Hong Kong Science Museum