For discussion on 10 May 2021

Legislative Council Panel on Home Affairs

The Support of the Government on the Development of Arts Technology in Hong Kong

Purpose

This paper briefs Members on the Government's measures in support of the development of arts technology (arts tech) and report the latest progress of relevant work.

Background

- 2. The Government has been committed to facilitating the development of arts and culture in Hong Kong. Arts and culture enrich the life of the general public while creativity drives society constantly forward. Our policy objectives are to create an environment conducive to the diversified development of arts and culture, to encourage artistic creation and innovation, to allow those with potential to develop their talents, and to enable a wide participation in arts and culture among the public.
- 3. With the advancement of technology in recent years, the integration of arts and innovation and technology (I&T) has become a new trend in arts development. I&T brings breakthroughs in stage design, image projection and sound effects for performing arts, offers technical enhancements in the above-mentioned areas, inspires creativity and opens up a brand new space for creation. All these turn previous impossibilities into realities in terms of effect manipulations, and bring new opportunities for the arts and the creative industries. In the Policy Address delivered in October 2020, the Chief Executive stated that the Government would actively promote and support the development of arts tech and asked the Secretary for Home Affairs to take the lead in setting up an inter-departmental Task Force on Arts Technology (Task Force) to formulate strategies and measures for the development and promotion of arts tech.

Task Force on Arts Technology

4. The Secretary for Home Affairs chairs the inter-departmental Task Force comprising representatives of the Home Affairs Bureau (HAB), the Commerce and Economic Development Bureau (CEDB), the Innovation and Technology Bureau (ITB), the Education Bureau (EDB), the Innovation and Technology Commission (ITC) and the Leisure and Cultural Services Department (LCSD). At its first meeting held in February 2021, the Task Force discussed strategies and measures to promote arts tech. A total of \$100 million has been earmarked from the funds and schemes managed under the purview of the bureaux, including HAB's Arts and Sport Development Fund (ASDF), ITB's Innovation and Technology Fund (ITF), CEDB's Film Development Fund (FDF) and CreateSmart Initiative (CSI), for those who are interested in promoting arts tech to apply. The funds or schemes have specific objectives and targets, details of which are set out in **Annex 1**. In order to assist the industry to take forward proposals related to arts tech, the Task Force will provide a one-stop service to answer applicants' queries and refer them to the suitable fund or scheme where appropriate. The Task Force will consult the relevant industries and their representatives on its work plan as appropriate.

Supporting arts tech projects

5. The Arts Capacity Development Funding Scheme (ACDFS) (Arts Portion) under HAB's ASDF provides funding support to large-scale and cross-year arts and cultural initiatives/projects with a view to enhancing capacity development of promising small and medium-sized arts groups and artists, and encouraging the community and private sector to sponsor the arts and cultural community. When the 10th round of funding application under the ACDFS was launched in December 2020, a new Arts Technology category was added to draw the attention of the arts and cultural community and encourage members of the sector to incorporate technology application in different arts projects. The 10th round of funding application was closed in February 2021 with over 120 applications received, of which nearly 30 were submitted under the Arts

Technology category¹. A number of applications under other categories also involved elements integrating arts and technology. Assessment is underway in accordance with the established mechanism and the results are expected to be released in July.

- 6. As for the CSI and FDF under CEDB's purview, CEDB will actively encourage and consider funding applications encompassing arts tech elements and fulfilling the established eligibility criteria and strategic directions. Application of new technologies in the local film industry and other creative sectors will enhance the quality, variety and user experience of their products and services. This can also promote Hong Kong as Asia's creative capital.
- To help promote the development of arts tech, the ITF under ITB welcomes 7. applications from the arts tech industry for various funding schemes. In particular, the Technology Voucher Programme (TVP) and the General Support Programme (GSP) under the ITF provide funding support to projects that promote technology application and an innovation and technology culture in connection with arts. Relevant applications were accepted in the past. The TVP provides funding for enterprises and organisations to use technological services and solutions in improving productivity or upgrade/transform their business processes. The GSP supports non-research and development projects that help to upgrade and develop our industries, and to foster an innovation and technology culture in Hong Kong. There is no annual cap on the number of funded projects or funding amounts under the two funding schemes. ITB welcomes applications from the arts sector.
- 8. The Task Force is also concerned about nurturing arts tech talent to complement and help promote the development of arts tech, and engaging more young people in the arts and cultural field. The Hong Kong Academy for Performing Arts provides programmes covering arts tech at the School of Theatre and Entertainment Arts to nurture talent for the industry. As for other tertiary institutions, the existing programmes related to arts or creative media already cover topics related to arts tech. We believe that these tertiary institutions will liaise with stakeholders from time to time to

¹ The some 30 projects submitted under the Arts Technology category vary in quality, which reflects the varying degrees of understanding and mastery of arts tech among the applicants. There are few projects under application that can truly integrate arts and technology and are prospective of promising results. Some projects only involve developing a web-based platform or presenting the artworks online, while others, which even include elements of technology application (such as motion capture technology, augmented reality, virtual reality, artificial intelligence, 3D graphics technology and 3D printing), seem doubtful in terms of the enhancement effects on the expression and impression of performing or visual artworks. Notwithstanding the varying quality, the number of applications received is encouraging and clearly demonstrates the arts sector's interest in arts tech and willingness to experiment with it. This is a good start.

keep abreast of the latest trends and industry needs with a view to ensuring the relevancy of their programmes to social development.

Upgrading venue facilities

9. In addition to policy and resource support, the Government will also provide matching hardware for the development and application of arts tech in terms of venue facilities. The broadband network facilities of LCSD performance venues are being upgraded in full swing to provide high-speed and secure data transmission services for live streaming or recorded performances of arts groups. Upgrading works have been completed at Hong Kong Cultural Centre, Hong Kong City Hall, Sai Wan Ho Civic Centre, Ko Shan Theatre New Wing, Ngau Chi Wan Civic Centre, Kwai Tsing Theatre, Yuen Long Theatre, Sha Tin Town Hall, Tsuen Wan Town Hall, Tuen Mun Town Hall and North District Town Hall. Relevant upgrading will be carried out shortly at Ko Shan Theatre Old Wing. As regards Tai Po Civic Centre, Sheung Wan Civic Centre and Yau Ma Tei Theatre, broadband network facilities will be installed upon completion of the facility upgrading and improvement works. On the other hand, LCSD is procuring by phases 4K pan-tilt-zoom camera, camera remote controller and related digital equipment for live streaming for its venues to support live streaming or video recording of arts groups. Also, some venues are already equipped with 4K 3-Chip digital light processing projector, immersive effect sound system and LED moving lights for arts groups to apply technology in their performances. Moreover, the East Kowloon Cultural Centre (EKCC), scheduled for opening in 2023, will have, in addition to advance I&T equipment, a testbed studio called The Lab to be used as an incubator for the development of arts tech.

Promoting arts tech

10. To help promote the development of arts tech, LCSD will implement a series of industry engagement activities in phases. To give the relevant sectors a preview on the positioning of the EKCC in arts tech, LCSD organised six sessions of the East Kowloon Cultural Centre x Arts Technology workshop at the Exhibition Gallery of Tsuen Wan Town Hall from 11 to 12 March 2021. Over 400 arts practitioners, I&T talents and representatives from educational institutions attended the sessions to learn about the development directions of the EKCC in future. A local innovative arts group also shared its experience on the integration of arts and technology at the workshop to raise awareness in the industry. LCSD will hold eight more sessions of the East Kowloon Cultural Centre x Arts Technology workshop at the Exhibition Gallery of Tsuen Wan Town Hall from 13 to 15 May 2021 to introduce arts tech to the education sector for

young people to learn about the prospects of the industry. To allow stakeholders to experience first-hand the possibilities relating to arts tech, LCSD has set up a temporary "Pre-testbed Studio" at the Rehearsal Room of Kwai Tsing Theatre to run from late April to May 2021. LCSD will host 73 guided visits to showcase to the arts, technology and education sectors the equipment and technology related to arts tech, including immersive audio and real-time tracking of audio effects, real-time tracking of projection images, extended reality (XR) and virtual production, real-time passive optical tracking/motion capture system, etc. Some 1 000 industry representatives are expected to attend the event.

11. Moreover, LCSD has set up communication platforms for the arts and culture and technology industries to make joint efforts to explore and develop areas of collaboration and application in arts and technology. LCSD and the Hong Kong Science and Technology Parks Corporation co-organised the Arts x Tech Meetup@Science Park and a retreat at the Hong Kong Science Park from 20 to 22 April 2021 where 12 I&T enterprises showcased their latest technologies and solutions. With around 1 000 participants from the arts and technology industries, the event served to link I&T enterprises with arts groups and will hopefully have a positive impact on the promotion of arts and technology integration. Details of the above activities are at **Annex 2**.

Way forward

- 12. According to our observation during the above activities, arts and culture and I&T practitioners were both extremely interested in arts tech. This exemplifies the need for greater interaction between the two industries to facilitate mutual understanding so that creators in the arts and culture industry can better grasp the application and integration of technology in artistic and cultural creations in an organic way for achieving breakthroughs in artistic expression and offering new artistic experiences for audiences. Arts tech is not about adopting technology for technology's sake but rather integrating technology in arts in an organic way to significantly raise artistic standards. Therefore, our key priority for the coming year is to promote and deepen the interaction and understanding between the arts and culture and I&T industries with a view to inspiring more ideas for innovation and advancement in arts and also enhancement and wider application of technology.
- 13. To continue our proactive efforts in promoting arts tech, the Task Force has scheduled a sharing session in mid-2021 to further introduce the funds and programmes under the respective purview of relevant policy bureaux to the relevant industries to provide support for their creative proposals related to arts tech. We also plan to continue

efforts on two aspects, namely, collection of views on the development of arts tech from advisory committees and bodies related to the arts and culture and the technology industries in the second half of 2021, and marketing and publicity of arts tech through different channels.

14. The rapid technical advancement presents endless possibilities and opportunities for the development of arts and culture in terms of application of technology. The Government will continue to support the integration of arts and innovative technology to facilitate artists/arts groups to suitably utilise technology to break through established framework, ideas, creations and to present novel artistic expressions whereby giving greater depth to their works and offering new artistic experiences for audiences and bringing in new perspectives for the industry. In the long run, we hope that arts tech will develop further in depth and create more jobs for arts practitioners and technology talents alike and facilitate industry development. We also hope that the organic integration of arts and technology can multiply benefits for both fields, which will in turn enhance Hong Kong's standing in the international arts arena, facilitate cultural exchange and strengthen our role as an international cultural metropolis.

Advice sought

15. Members are invited to note the contents of the paper and provide comments.

Home Affairs Bureau May 2021

Available Fund or Scheme to Support Arts Tech

Name of Fund or Scheme	Responsible Bureau	Objectives
Arts and Sport Development Fund – Arts Capacity Development Funding Scheme (ACDFS)	Home Affairs Bureau	To strengthen the cultural software and build the capacity of Hong Kong's arts sector, ACDFS provides funding support for innovative and impactful proposals that achieve the objectives of: • capacity development of arts practitioners, arts groups, art forms and/or the arts sector; • programme/content development; • audience building; and • arts education.
Film Development Fund (FDF)	Commerce and Economic Development Bureau (CEDB)	FDF aims to support projects and activities that are conducive to the healthy and sustainable development of the Hong Kong film industry in the long term along 4 strategic directions (namely, nurturing talent, enhancing local production, expanding markets and building audience).
CreateSmart Initiative (CSI)	CEDB	CSI aims to provide funding support for projects that are conducive to the development of 7 non-film creative industries (namely, advertising, architecture, design, digital entertainment, music, printing and publishing, and television) with the following 3 strategic objectives: • nurturing talent and facilitating start-ups; • exploring markets; and • promoting Hong Kong as Asia's creative capital and fostering a creative atmosphere in the community.
Technology Voucher Programme under the Innovation and Technology Fund (ITF)	Innovation and Technology Bureau (ITB)	To support local enterprises/organisations in using technological services and solutions to improve productivity or upgrade/transform their business processes.
General Support Programme under the ITF	ITB	To support non-research and development projects that help to upgrade and develop our industries, and to foster an innovation and technology culture in Hong Kong.

Leisure and Cultural Services Department (LCSD) Activities for Promotion of Arts Tech

"East Kowloon Cultural Centre x Arts Technology" Workshop

Date : 11 & 12 March 2021 (Thursday & Friday)

No. of Sessions : 6

Target Audience : Arts practitioners, technology talent, representatives from

educational institutions, etc.

Objective : To help the arts and technology industries enhance their

understanding of arts technology

Content : (1) Briefing on the future development of the East

Kowloon Cultural Centre

(2) Experience sharing by a local innovative arts group

on the integration of arts and technology

Venue : Exhibition Gallery, Tsuen Wan Town Hall









Visit the Temporary "Pre-testbed Studio" of East Kowloon Cultural Centre – A Sneak Peek of The Lab

Date : 26 April to 31 May 2021 (Monday to Friday)

No. of Sessions : 73

Target Audience : Arts practitioners, technology talent, representatives from

educational institutions, etc.

Objective : (1) To allow stakeholders to experience arts technology

personally as an effort to promote the exploration of

possibilities relating to arts technology

(2) To listen to the views of different parties on the future

equipment set-up and mode of operation of The Lab

Content : (1) Immersive Audio and Real-time Tracking of Audio

Effects

(2) Real-time Tracking of Lighting Effects

(3) Immersive Projection Mapping

(4) Real-time Tracking of Projection Images

(5) Extended Reality (XR)/Virtual Production

(6) Real-time Passive Optical Tracking/Motion Capture

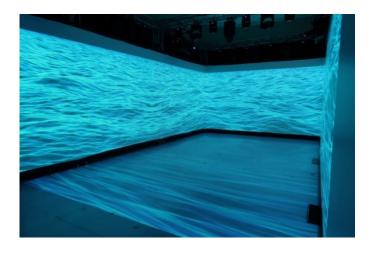
System

(7) Real-time Inertial Sensor Full-body Motion Capture

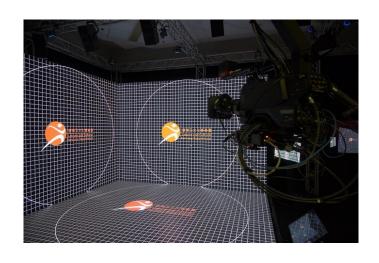
and Facial Expression Capture

(8) Live Streaming System

Venue : Rehearsal Room, Kwai Tsing Theatre









Arts x Tech Meetup @ Science Park

[Part I – Arts x Tech Meetup]

Date : 20 to 22 April 2021 (Tuesday to Thursday)

Target Audience : Arts practitioners, representatives from cultural organisations

and educational institutions

Activity : (1) A meet-up with 12 innovation and technology (I&T)

enterprises* from the Hong Kong Science Park

(2) Sharing sessions

Venue : Grand Hall

[Part II – VIP Retreat]

Date : 22 April 2021 (Thursday)

Target Audience: Representatives from the Home Affairs Bureau, LCSD,

Architectural Services Department, Advisory Committee on Arts Development, Hong Kong Arts Development Council, Hong Kong Jockey Club Music and Dance Fund, major

performing arts groups, etc.

Activity/Venue : (1) Sharing sessions by 12 I&T enterprises at the Charles

K. Kao Auditorium

(2) Showcase of arts technology at the Grand Hall

(3) Visits to Hong Kong Science and Technology Parks Corporation Experience Centre and China Mobile Hong Kong 5G Innovation Centre Hong Kong Open

Lab

*Participating I&T enterprises

- 1. IOIO Limited
- 2. onActivity Technologies Limited
- 3. Marvel Digital Limited / Marvel Digital AI Limited
- 4. Lighthouse Technologies Limited
- 5. Chain Technology Development Company Limited
- 6. MICology Limited
- 7. Easy VR Technology Limited
- 8. City Image Technology Limited
- 9. Kazoo Technology (Hong Kong) Limited
- 10. Asiabots Limited
- 11. Application Technology Company Limited
- 12. King City Technology Limited







