For information on 13 June 2014

Legislative Council Panel on Home Affairs Provision of Stage Facilities at Performance Venues under the Management of Leisure and Cultural Services Department

Purpose

This paper informs Members of the provision and upgrading of stage facilities at the performance venues managed by the Leisure and Cultural Services Department (LCSD).

Existing Stage Facilities at LCSD's Performance Venues

2. Currently, the LCSD manages 16 performance venues, including 14 performing arts venues¹ and two indoor stadia² which are open for public hiring. The performing arts venues are equipped with a wide range of specialist stage facilities and equipment to facilitate the efficient mounting and staging of different types of professional stage performances. The major stage provisions at LCSD's venues include:

- (a) Stage facilities :
 - i) stage machinery and equipment, e.g. flying bars, motor hoists, sound reflectors, side acoustic curtains, acoustic shells, revolve stage units, stage wagon, orchestra pit elevators, stage curtains, etc.;
 - ii) musical instruments, e.g. piano, timpani, harp, harpsichord, etc.; and

¹ The 14 performing arts venues are the Hong Kong Cultural Centre, Hong Kong City Hall, Ko Shan Theatre, Ngau Chi Wan Civic Centre, Sai Wan Ho Civic Centre, Sheung Wan Civic Centre, Yau Ma Tei Theatre, Sha Tin Town Hall, Kwai Tsing Theatre, Tsuen Wan Town Hall, Tuen Mun Town Hall, Yuen Long Theatre, Tai Po Civic Centre and North District Town Hall.

² The two indoor stadia are Hong Kong Coliseum (HKC) and Queen Elizabeth Stadium (QES).

- iii) ancillary facilities such as sprung floor, dance flooring, choir risers, retractable seating systems, etc.
- (b) Audio-visual facilities including sound mixing consoles, speakers, microphones, playback and recording machines, projectors, surtitle systems, production communication systems and stage management consoles;
- (c) Lighting facilities including lighting consoles and dimmers, stage lights, special effect machines (e.g. fog machines, strobe lights, UV lights); and
- (d) Film projection and digital cinema systems in selected venues.

With the exception of purpose-built facilities such as concert halls, 3. LCSD's performance venues can generally be used for staging performances of different art forms³. The stage provisions in these venues are multi-functional, with variations tailored to suit the specific architectural structure and design characteristics of the individual venues. The provisions are capable of meeting most of the general technical requirements and production needs of different types of performances, thereby saving the hirers and presenters the need to bring in their own stage equipment. This arrangement has been working well and positively received by the professional performing groups, international performing companies, entertainment presenters, district arts groups and other hirers. Only a number of hirers (around 8% of all bookings) had brought in their own or hired equipment (e.g. high-power projectors, moving lights, specific sound equipment and control panels) to LCSD's venues to serve their specific production needs.

4. On the other hand, the two indoor stadia, namely the Hong Kong Coliseum (HKC) and Queen Elizabeth Stadium (QES), are arena-type facilities originally designed for large-scale sports events, although they are now frequently used for staging pop concerts, variety/talk shows and major community events (e.g. religious gatherings, charitable/fund raising events). As a multi-purpose venue for both sports and cultural events, the two stadia are equipped with suitable floorings and scoreboard systems required by sports activities, as well as basic stage facilities (e.g. sound and stage lighting systems, stage risers, seating risers) for pop concerts, performances and ceremonies. In the case of pop concerts, the trade practice is that presenters in the entertainment industry will create their own stage layout with

³ Except for the Yau Ma Tei Theatre which is designed for staging Chinese opera, in particular Cantonese opera.

production-specific lighting and sound effect designs which form part of the core attraction of their presentations.

Upgrading of Stage Facilities

5. To enable LCSD to upkeep its performance venues to meet the requirements of professional stage productions, the Department has formulated plans for improving and upgrading the stage provisions of its venues.

(a) Upgrading Plans

6. LCSD has formulated upgrading plans for the 16 performance venues with the aim of enhancing the technical capabilities of their stage provisions. Given the large number of venues and the scope of stage provisions involved (paragraph 2 above refers), the Department has prioritized the upgrading works and implement them by phases, subject to resource availability, having regard to such considerations as stage safety, the average and projected life span of the equipment ⁴, usage and cost-effectiveness of the equipment, site and operational constraints, hirers' production needs, and latest trends of the performing arts/entertainment industries.

7. While LCSD strives to maintain the attractiveness and competitiveness of its performance venues, in view of the pace of technological development and the fast-changing needs of the creative industries, a prudent and cost-effective approach is adopted in the procurement of equipment and facilities, instead of going after the state-of-the-art provisions in the market which may not be widely used by the hirers.

(b) Recent Upgrading Projects

8. In the past three years, LCSD has dedicated a total of \$54.7 million to the enhancement of the stage, lighting and audio-visual provisions of its performance venues. Major enhancement projects completed in the past three years included :

⁴ Replacement cycle is determined by the life span of the equipment, being: (a) Electronics – medium grade (e.g. audio playback equipment) – 5 to 10 years; (b) Electronics – top grade (e.g. control console, speaker system, projector) – 7 to 15 years; (c) Electrical (e.g. lighting luminaires, dimming systems) – 10 to 20 years; (d) Mechanical (e.g. flying bars, elevators) – 20 years or above.

- i) Installation of a new digital cinema system at the Grand Theatre of Hong Kong Cultural Centre (HKCC);
- ii) Completion of an acoustics study and the mock installation of sound reflector extension at the Concert Hall of HKCC, which have brought about improvements in the acoustics of the Concert Hall;
- iii) Replacement of the acoustic shell at the Auditorium of Tuen Mun Town Hall, and the stage management consoles at the Sheung Wan Civic Centre and Ngai Chi Wan Civic Centre respectively; and
- iv) Replacement of the sound and lighting systems at various performance venues including the profile lights and follow spot lights at the HKC.

9. A list of major enhancement projects completed from 2011-2014 is at **Appendix A**.

(c) Planned Upgrading Projects

10. Planning for the upgrading of the stage facilities in 11 of LCSD's performance venues is underway. These include:

- i) Procurement and installation of high-power projectors capable of creating images as backdrop for live performances at the Auditorium of Kwai Tsing Theatre (KTT). These projectors are increasingly used and requested by professional performing companies as part of their creative works;
- ii) Upgrading of the stage automation system (including the computerized flying system) at the Auditorium of KTT to ensure the continued provision of quality support for sophisticated productions and to enhance stage safety;
- iii) Replacement of the LED display system at the HKC with a front-projection display system. Due to the high utilization rate (100%) of HKC and its LED system, the quality of the LED projection has been deteriorating and cannot fully meet the production needs of the entertainment industry. The latest front-projection display system will provide better display quality and take up less loading capacity of the roof truss;

- iv) Installation of an advanced digital cinema system at the Theatre of Hong Kong City Hall (HKCH), a popular venue for staging programmes of film festivals such as the Hong Kong International Film Festival and Le French May Festival. With the development of digital technology, many movie productions are now produced and screened in the digital format and the existing film projection system at the HKCH Theatre cannot meet the requirements;
- v) Extension of the sound reflector at the Concert Hall of the HKCC as a follow-up to the mock installation completed in 2013 (paragraph 8(ii) above) with a view to improving the overall acoustic performance of the Concert Hall; and
- vi) Renovation and upgrading of the Tai Po Civic Centre (TPCC), including its stage and lighting system, audio-visual equipment, air-conditioning system, backstage facilities as well as seating in the Auditorium. The TPCC was opened in 1985 for shared use with the Tai Po Government Secondary School. The design and stage provision of TPCC are in need of upgrading to meet the production and performance needs of professional arts groups.

11. A list of major upgrading plans for LCSD's performance venues is at **Appendix B**.

Stakeholder Engagement

12. The Department is mindful of the wide spectrum of users and stakeholders that its performance venues and stadia serve. Views and comments that reflect the needs of various types of users and stakeholders are collected through regular customer liaison meetings, technical and operation meetings, questionnaires as well as informal dialogues. Besides, the Department keeps track of the commissioning of new performance venues around the world, and engages in on-going dialogues with the administrative and production personnel of local and overseas professional performing groups to collect information on the latest technological and market developments in the field. The Department also arranges its venue management and technical staff to attend relevant overseas training and conferences.

13. The management and mode of operation of LCSD's performance venues follow the prevailing trade practices of international performance venues. With the diversified scope of well-maintained facilities and quality services, our venues are capable of supporting a wide variety of local and international stage presentations including the Hong Kong Arts Festival, Le French May Festival, Broadway musicals and LCSD's presentations of local and international arts groups and artists. The Department is committed to the continuous enhancement and upgrading of the stage facilities and technical services provided at its performance venues and stadia, with a view to meeting the hirers' changing production needs and enhancing the audience's experience.

Advice Sought

14. Members are invited to note the content of this paper.

Home Affairs Bureau Leisure and Cultural Services Department June 2014

Major Stage Facilities Enhancement of LCSD's Performance Venues in the Past Three Years (2011-2014)

Venue	Project Details	
Hong Kong City Hall	• Improvement of counterweight flying bars system and fire curtain system at Concert Hall	
	• Replacement of lighting dimmer and fire curtain wiring at Theatre	
Hong Kong Cultural Centre	 Replacement of flying system operating console, surtitle board, lighting console, enhancement of stage wagon, procurement of digital cinema system and stage lights at Grand Theatre Acoustic study and enhancement of sound reflector at Concert Hall 	
Ko Shan Theatre	• Upgrading of digital audio console at Theatre	
Sheung Wan Civic Centre	• Replacement of lighting dimmer and stage management console at Theatre	
Sai Wan Ho Civic Centre	• Replacement of house speaker system, stage lighting consoles and wireless microphones at Theatre	
Ngau Chi Wan Civic Centre	• Replacement of modular retractable seating system at Cultural Activities Hall	
	• Replacement of stage management console and reinforcement of fly gallery railings and loading area fall arrest system at Theatre	
Sha Tin Town Hall	• Replacement of motorized drive system for stage curtains at Auditorium	
Kwai Tsing Theatre	• Replacement and modification of major electronic components of computerized flying system at Auditorium	
Tsuen Wan Town Hall	 Replacement of sound mixing console at Auditorium Upgrading of retractable seating system, replacement of house curtain, installation of hanging device and modification of ceiling fixture to improve sightline at Cultural Activities Hall 	
Tuen Mun Town Hall	• Replacement of counterweight flying bars system and upgrading of acoustic shell at Auditorium	
	• Upgrading of retractable seating system, replacement of house curtain and installation of hanging device at Cultural Activities Hall	
Yuen Long Theatre	Replacement of house speaker system at Auditorium	
North District Town Hall	• Replacement of audience seating and public address system at Auditorium	
Hong Kong Coliseum	• Replacement of stage lighting equipment including profile lights and follow spot lights at Arena	

Venue	Project Details	Remarks
Hong Kong Coliseum	• Replacement of lighting control system and LED display system at Arena	 The lighting control system has been in use for over 10 years and its performance is deteriorating. Replacement is required to enhance technical efficiency. The LED display system was installed in 2008 as part of the 2009 East Asian Games renovation project. Due to deterioration of the system and for enhancement of loading capacity, replacement is required.
Kwai Tsing Theatre	• Upgrading of stage automation system at Auditorium	• The system was installed since the Theatre's opening in 1999 and upgrading is required to enhance technical efficiency and ensure stage safety.
	• Procurement of high power projectors at Auditorium	• It is observed that the requests for use of high power projector capable of creating images as backdrop for live performances have risen at this venue. Procurement is necessary to meet users' aspiration.
Hong Kong City Hall	Replacement of wireless microphones at Concert Hall	• The system has been in use for 11 years and replacement is obligatory for provision of quality service.
	• Installation of digital cinema system at Theatre	• With the development of digital technology, digital cinema has become a worldwide standard and purchase of a digital cinema system is needed to cope with demands of the hirers.
Hong Kong Cultural Centre	• Upgrading of flying control system at Grand Theatre	• The system has been heavily used for over 10 years and upgrading is necessary to enhance technical efficiency and stage safety.
	• Extension of sound reflector at Concert Hall	• Extension of the sound reflector, as a follow-up to the mock installation done in the previous year, will improve the overall acoustic performance of the Concert Hall.
	• Replacement of speaker system at Concert Hall and lighting dimmer, house lights	• The various systems have been heavily used for over 10-24 years and replacement will enhance technical

Forthcoming Major Upgrading Projects of LCSD's Performance Venues Upcoming plans for 2014-15 and beyond

Appendix B

Venue	Drajaat Dataila	(p.2) Remarks
venue	Project Details and retractable seating system at Studio Theatre	efficiency and public safety.
Ko Shan Theatre	• Replacement of public address system at Theatre	• The system has been used for 11 years and replacement is essential to enhance technical efficiency.
Sai Wan Ho Civic Centre	• Replacement of stage management console and acoustic shell at Theatre	 The stage management console has been in service since 1990 and replacement will enhance the overall communication and control during stage productions. The acoustic shell has been in use since 1990 and replacement is essential to meet the basic requirement of music events and ensure stage safety.
Ngau Chi Wan Civic Centre	• Procurement of paging system at Theatre	• Being the only venue not yet equipped with a paging system which is essential to deliver general and emergency house announcement to patrons, the procurement is necessary to match up with prevailing stage practices.
Sha Tin Town Hall	• Replacement of winch system for safety curtain, wires for flying system, and musician platform for orchestra pit at	• The various systems have been in use for many years and replacements are necessary to ensure stage safety.

	Auditorium	
Tuen Mun Town Hall	• Replacement of lighting dimmer system at Auditorium	• The system has been installed at the venue since its opening and replacement with enhancement of power supply is required to ensure reliable and up-to-standard lighting services.
Yuen Long Theatre	• Replacement of lighting console at Auditorium	• The console has been heavily used for over 10 years and replacement is required to ensure smooth running productions.
Tai Po Civic Centre	• Major overhaul and upgrading of stage, lighting, audio-visual equipment and air-conditioning system, as well as enhancement of power supply, backstage facilities and seating at Auditorium	