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10 December 2013

Ms Yue Tin-po
Clerk to Panel on
Information Technology and Broadcasting
Legislative Council
1 Legislative Council Road
Central, Hong Kong

Dear Ms Yue,

**Construction of New Broadcasting House for
Radio Television Hong Kong at Area 85, Tseung Kwan O**

At the Panel meeting held on 11 November 2013, while supporting in principle the proposal of the construction of the new Broadcasting House for Radio Television Hong Kong, Members requested the Administration to provide supplementary information. On 15 November 2013, Hon Christopher CHUNG Shu-kun also wrote to the Panel requesting the Administration to provide additional information on the proposal.

We submit the requested information mentioned above at the Annex and would be grateful if you could convey it to the Panel members for their reference.

(Aaron Liu)
for Secretary for
Commerce and Economic Development

c.c. Director of Broadcasting
Director of Architectural Services

Construction of the New Broadcasting House for Radio Television Hong Kong at Area 85, Tseung Kwan O

Supplementary Information

Background

At the meeting on 11 November 2013, members supported in principle the proposal to construct the New Broadcasting House (New BH) for Radio Television Hong Kong (RTHK) and requested the Administration to provide supplementary information for members' reference. This paper provides the information requested.

Reasons for the increase in the project cost estimate and the cost required for various facilities

2. From October 2009 to January 2010, the Government conducted a comprehensive public engagement exercise on the scope of services of RTHK. After confirming public support, the expanded scope of services was incorporated into the RTHK Charter promulgated in August 2010. The scale of and the facilities required for the New BH are proposed on the basis of the operational requirements arising from the new services.

3. As mentioned in paragraph 28 of the Legislative Council (LegCo) Brief submitted by the Administration on 22 September 2009, the construction of a New BH in Tseung Kwan O (TKO) would cost an estimate of \$1,600 million. This was based on the results of the first preliminary project feasibility study conducted in 2000 which estimated that the cost of the project was around 1,500 million at that time. However, the accommodation requirements for the New BH proposed in 2000 have not taken into account the requirements for the various new services to be undertaken by RTHK after it had been tasked to fulfill the role of the public service broadcaster (PSB) for Hong Kong in 2009, which include additional accommodation and manpower required for Radio Division, Television Division and Newsroom arising from the launch of digital audio broadcasting (DAB), digital terrestrial television (DTT) broadcasting services, establishment of a digital media asset management (MAM) system, as well as additional accommodation and manpower for the Engineering Section, technical facilities for information

technology and new media and specialist facilities. Moreover, the original site in TKO Area 86 is smaller in size than the current site and the construction cost has been surging in recent years. Owing to the reasons mentioned above, we could not make a direct comparison between the cost estimate mentioned in 2009 and the current cost estimate for the new BH. In fact, in the LegCo Brief issued in 2009, we mentioned clearly that the cost estimate would be subject to the detailed architectural design and accommodation requirements.

4. At the end of 2010, the Administration identified another site in TKO Area 85 as the new site for the development of the New BH. Having regard to RTHK's new services requirement, the Architectural Services Department completed a second technical feasibility study on the New BH. It then proceeded with tender arrangements based on the current accommodation requirements for all the facilities and derived the latest cost estimate. In other words, the cost estimate in 2000 and the latest cost estimate in 2013 are based on totally different sites and requirements of services and accommodation. A detailed explanation for the changes in project cost estimate between 2000 and 2013 is at **Appendix**.

5. The estimated construction cost for various facilities mentioned in Enclosure 3 of LC Paper No. CB(4)113/13-14(05) is as follows:

	Facilities	Estimated Cost (million)	Respective Percentage of total cost
(a)	Sound broadcasting facilities	704.0	12%
(b)	DTT broadcasting facilities	1,544.2	26%
(c)	News	678.6	11%
(d)	Engineering and Media Asset Management	614	10%
(e)	Accommodation for staff	1,144.3	19%
(f)	Departmental common facilities	438.6	7%
(g)	Information Technology and New	191.4	3%

	Media facilities		
(h)	Specialist facilities	740.5	12%
	Total	6,055.6	100%

Potential effect of RTHK's DTT broadcasting services on the local TV market

6. As the public service broadcaster of Hong Kong, the mission of RTHK is to serve a broad spectrum of audiences and cater for the needs of minority interest groups. In relation to public service TV services, one of the objectives of RTHK is to provide TV services in areas not adequately provided by commercial TV broadcasters. As RTHK would not take part in any commercial operation, market share would not be an objective of its operation and thus no assessment has been made in this respect.

7. Given its public purposes, viewership is not a major consideration when assessing the performance of RTHK's TV services. Moreover, viewership ratings could not fully reflect the quality and character of TV programmes. RTHK therefore introduced a TV programme appreciation index developed by BBC and has commissioned survey house to conduct the Television Programme Appreciation Index (AI) surveys since 1991 with a view to evaluating the comments, appreciation levels and preference of Hong Kong audiences on local TV programmes. The AI has now become a professional indicator other than viewership ratings. Since 1998, RTHK has attained the highest average annual appreciation index figures amongst all local TV stations.

8. RTHK will continue to conduct the Television Programme AI surveys and viewership ratings survey on its new DTT channels. RTHK is considering to set new performance measures such as commissioning polling organisations to gauge its audience reach and figures on daily access to media so as to reflect more accurately and effectively the quality, character and acceptance of RTHK's TV programmes.

9. With the launch of DTT services by RTHK, the public will have more choices in addition to the services delivered by the existing commercial free TV broadcasters. Given different operation modes and that there is no need

for RTHK to have regard to advertising income, it is not appropriate to compare the services of RTHK as the PSB with that of the commercial free TV broadcasters. We consider that their coexistence should create a balanced broadcasting ecology that contributes to plurality.

RTHK's further development plan upon commissioning of the New BH

10. To fulfill its mission as the PSB of Hong Kong, RTHK has been embarking on various new services and projects, including the launch of DAB and DTT broadcasting services, facilitating community involvement in broadcasting, establishing a digital MAM system and planning for the construction of the New BH in TKO.

11. Looking ahead, with the commission of the New BH, RTHK will be provided with necessary space and broadcasting facilities to develop an all-round broadcasting services to the community. RTHK will continue to provide to Hong Kong people editorially independent, professional and high-quality radio, television and new media services according to the RTHK Charter. Specifically, the mission of RTHK¹ is to –

- (a) inform, educate and entertain members of the public through multi-media programming;
- (b) provide timely, impartial coverage of local, national and global events and issues;
- (c) deliver programming which contributes to the openness and cultural diversity of Hong Kong;
- (d) provide a platform for the Government and the community to discuss public policies and express views thereon without fear or favour; and
- (e) serve a broad spectrum of audiences and cater to the needs of minority interest groups.

12. On DAB services, RTHK will further develop its five DAB programme channels, produce new types of DAB programmes and enrich the programme content of the DAB channels. After the commissioning of the New BH, there will be adequate facilities to further develop DAB services. For DTT services, RTHK plans to fully launch its three high definition TV

¹ Extracted from paragraph 5 of RTHK Charter.

channels and provide 24-hours broadcasting after the commissioning of new BH. Regarding the new media, RTHK will continue to extend its high quality radio and TV programming to the audiences by leveraging the different platforms in the new media and technology advancement. RTHK will brief Members on the details of its future development plan as appropriate in future.

Annual recurrent expenditure after commissioning of new BH

13. RTHK's total expenditure is estimated to be \$754.3 million in 2013-14. In this financial year, an additional provision of \$84.5 million has been allocated for RTHK to implement DTT services (including the creation of additional 85 civil service posts and seven contract positions) and creation of 20 civil service posts for replacing non-civil service contract positions with long-term service needs. Regarding RTHK's recurrent expenditure after the commissioning of the New BH, we could not provide the relevant figures at this stage as it depends on the operational needs, the implementation of various new services and the additional funding and manpower allocated to RTHK in the coming years. We estimate that the annual recurrent expenditure arising from the New BH project to be \$78.8 million.

Possibility of accommodating a data centre in the New BH

14. The floor area allocated for information technology and new media facilities in the New BH will increase from the current 190 m² to 1,130m² (+495%). It is mainly due to the needs to consolidate and upgrade the existing facilities that scattered in different locations and are non-compatible and sub-standard to meet the operational requirements of RTHK and the increase in new media production. The New BH will be provided with a server room for internal use only and for saving the data concerning all systems, media and the daily operation. Moreover, RTHK has been hiring server capacity and services from two Internet service providers (ISPs) for providing internet service. The data centres of these two ISPs are of Tier 3 level.

Compliance with international standard of green building

15. RTHK will adopt the latest Building Environmental Assessment Method (BEAM-Plus) for New Building recognised by the Hong Kong Green Building Council in the construction of the New BH and strive to follow the

sustainable building design with a view to achieving the “Gold” grade.

16. Besides, the curtain wall adopted in the New BH would be in high performance Low-e coated glass, which is different from the conventional reflective coated glass. The Low-e coated glass not only has the properties of low reflectivity and high light transmittance, but also performs well in thermal insulation. Moreover, the outdoor lighting design would comply with the BEAM Plus - SA15 requirement so as to ensure that it does not create light pollution to adjacent environment.

**Commerce and Economic Development Bureau
Communications and Technology Branch
December 2013**

Appendix

New Broadcasting House of Radio Television Hong Kong

Changes in Project Cost Estimate between 2000 and 2013

A comparison of the first Preliminary Project Feasibility Study (PPFS) estimate carried out in 2000 and the latest cost estimate (updated in 2013 as per the PWSC submission) -

	(A)	(B)	(B) – (A)
	PPFS (July 2000)	Latest cost estimate	Difference
	(adjusted to September 2013 prices)^{See Notes}	(at September 2013 prices)	
	\$ million		
(a) Site Works	4.5	28.7	24.2
(b) Piling works	58.9	246.4	187.5
(c) Building works	940.3	2,302.1	1,361.8
(d) Building Services Works	433.7	795.7	362.0
(e) Drainage works		28.1)	
(f) External works	41.7	44.1) 72.2	30.5
(g) Footbridge	15.7	-	(15.7)
(h) Energy conservation, green and recycled features	-	81.2	81.2
(i) Furniture and equipment	550.9	929.6	378.7
(j) Consultants' fees	60.2	31.2	(29.0)
(k) Remuneration of resident site staff	-	64.0	64.0
(l) Contingencies	239.3	455.1	215.8
Sub-total	2,345.2	5,006.2	2,661.0

(m)Provision for price adjustment	-	1,049.4	-
	\$ million (in money-of-the-day prices)		
Total	-	6,055.6	-

2. As regards (a), (b), (e) and (f) (**site works, piling works, drainage works and external works**), the total increase of \$242.2 million is due to -

- (i) larger site area with an increase of 77% from 17 303 m² (TKO Area 86 site) to 30 600 m² (TKO Area 85 site), as well as the increased complexity and extent of the site works involved at the new site, e.g. site clearance, demolition of existing structure, site formation, excavation and removal of contaminated soil etc; and
- (ii) piling system is changed from H-piles to large-diameter bored piles in order to reduce nuisance to neighbouring residents and to better suit the ground condition of the new site at TKO Area 85.

3. As regards (c) and (d) (**building works and building services works**), the total increase of \$1,723.8 million is due to the following factors -

- (i) the PPFs scheme prepared in 2000 was at very preliminary technical feasibility stage with no detailed requirements available. The current design (as reflected in the latest cost estimate) has taken into account the latest broadcasting technology and has catered for the latest operational requirements of the users, such as detailed acoustic and functional requirements of each recording studio, more sophisticated and advanced building services, IT, fibre optic network requirements etc. which have been widely adopted in recent major overseas broadcasting house developments and international broadcasting standards;
- (ii) the building design (as reflected in the latest cost estimate) is substantially different from PPFs stage. In the current building design, each of TV block and Radio block will be equipped with separate fire services, electricity supply and telecommunication systems with enhanced reliability to ensure continuity of broadcasting services in case of emergency;
- (iii) incorporation of the latest requirements / prevailing practices such as security requirements, curtain wall system with lower solar heat transmission, water saving devices, more environmentally friendly materials;
- (iv) the cost of contractor's design and site supervision are included in the current design-and-build procurement mode;
- (v) the estimated construction floor area (CFA) of the PPFs scheme prepared in 2000 was 60 000 m², and the CFA of the current design (as reflected in the latest cost estimate) is 84 436 m². The increase in CFA is due to various reasons, including

different layout configuration to suit the different site configuration; new functional requirements, e.g. requirement of independent operation of separate parts of the buildings, more circulation space, etc. Besides, increased floor areas are required for incorporation of the latest requirements of barrier-free access, new fire codes, occupational safety and health, sustainability building design and gender mainstreaming considerations, as an integral part of the design;

- (vi) various policy initiatives on construction safety, workers' welfare and green construction, such as enhancement on site safety, mandatory provident fund, site uniform, waste management, better noise control in construction activities, etc. have been incorporated.

4. As regards (g) (**Footbridge**), the reduction of \$15.7 million is due to the deletion of the requirement for footbridge in the latest design requirement subsequent to the change of the site from Area 86 to Area 85.

5. As regards (h) (**Energy conservation, green and recycled features**), the total increase of \$81.2 million is due to project environmental design features which were only introduced in recent years based on the latest government's green building policies. There was no such allowance in the 2000 PPFS scheme.

6. As regards (i) (**Furniture and equipment**), the total increase of \$378.7 million is due to inclusion of specialist equipment for implementation of new services such as Digital Terrestrial Television, Digital Audio Broadcasting, etc, as well as for replacement of aged equipment etc. which were previously not envisaged.

7. As regards (j) (**Consultants' fees**), the total reduction of \$29.0 million is due to the change from in-house with specialist consultants to design-and-build procurement method. Paragraph 3 (iv) above refers.

8. As regards (k) (**Remuneration of resident site staff**), the total increase of \$64.0 million is due to the change from in-house to out-sourced resident site staff.

9. As regards (l) (**Contingencies**), the total increase of \$215.8 million is for all the additional works listed above.

10. As regards (m) (**Provision for price adjustment**), this is not included in the cost estimate prepared in 2000 (at constant prices) at feasibility study stage. It is the established practice that cost estimates of capital works projects are updated to money-of-the-day prices in funding applications to the Public Works Subcommittee and Finance Committee.

Notes

- (a) The cost estimate of \$1,496 million provided in the PPFS in 2000 was based on the Building Works Tender Price Index (BWTPI) of 989 at 4Q 1999. In the LegCo Paper in 2009, the ballpark cost for a new BH was based on the estimate given in the 2000 PPFS with the cost adjusted to 3Q 2009 price level (BWTPI at 1 111) at that time.

- (b) A PPFS for the new BH project was carried out in 2000 for a site earmarked in TKO Area 86. The project was then put in abeyance because of firstly the Government's stringent financial position during the SARS period and then the conduct of the review of the public service broadcasting. On its re-activation after 2009, a fresh Technical Feasibility Statement (TFS) was prepared in 2011 based on a new set of project design requirements for the current site in TKO Area 85. The cost estimate prepared in 2011 with a BWTPi of 1 249 (3Q 2010) was \$4,412 million. With the price adjusted to September 2013 price level, the estimated cost of the project based on the TFS prepared in 2011 is \$5,475 million. The current cost estimate of \$5,006.2 million in September 2013 prices is about 8% lower than the TFS estimate.