

政府總部
民政事務局

香港添馬添美道二號
政府總部西翼十二樓



GOVERNMENT SECRETARIAT
HOME AFFAIRS BUREAU

12TH FLOOR, WEST WING,
CENTRAL GOVERNMENT OFFICES,
2 TIM MEI AVENUE,
TAMAR,
HONG KONG.

Translation

本函檔號 Our Ref: L/M HAB/R&S 129(17)
來函檔號 Your Ref :

電話號碼 Tel. No.: 3509 8127
傳真號碼 Fax No.: 2519 7404

By Fax: 2509 0775

16 May 2017

Legislative Council Complex
1 Legislative Council Road
Central
Hong Kong
(Attn: Ms Sharon Chung)

Dear Ms Chung,

**Public Works Subcommittee
Supplementary Information on Kai Tak Sports Park Project**

At the Public Works Subcommittee meeting on 10 May 2017, some Members requested additional information relating to the Kai Tak Sports Park (the Sports Park) project. The relevant information is attached in Annex for Members' reference.

Yours sincerely,

(Original signed)

(Ms Linda Law)
for Secretary for Home Affairs

Supplementary Information on the Kai Tak Sports Park Project

Follow-up item 1: Please provide the market analysis of how the approach without a “bid incentive” from the Government for the Kai Tak Sports Park (the Sports Park) project may result in insufficient number of tenderers;
and

Follow-up item 5(a): Please elaborate on the economic loss caused by re-tendering for the Sports Park project as a result of unsuccessful tendering and the subsequent failure in making available the facilities there for the public as scheduled

We have reached out to the market extensively during the planning stage of the Sports Park project. The feedback indicated that the scale, complexity and uniqueness of the project necessitates special procurement arrangements and incentives during the tendering exercise to attract a sufficient number of tenderers for submission of high quality and detailed bids, so as to increase competition and minimise the possibility of unsuccessful tendering.

2. In order to submit a quality bid and operate the Sports Park successfully, tenderers for the Sports Park project will have to face quite a number of challenges, including:

- (a) the need to gather a team comprising a wide spectrum of expertise and experience ranging from design, construction, venue operation, events management, facilities management, retail operation, turf specialist, marketing and promotion, etc.;
- (b) the substantial financial commitments devoted to the bidding process, including consultancy fees to be paid to various specialists as mentioned in paragraph (a) above in preparing the bid. (Taking into account the market feedback received, the bid cost estimation made by the Operations Consultant using the man-hour approach and the cost¹ of pre-construction consultancies incurred by the Government, we estimate that the bid cost for the project is in the region of **\$100 million to \$200 million**);

¹ A total of some \$110 million has been incurred by the Government for conducting pre-construction works for the Sports Park project, including the appointment of (a) an Operations Consultant to provide advice on procurement strategies, business plans, financial projections and operating requirements etc.; (b) a Technical Services Consultant to provide reference designs and technical specifications; (c) a Legal Services Consultant to advise on the drafting of the operations part of the tender documents; (d) a Quantity Surveying Consultant to advise on the costing and compilation of the design and build part of the tender documents; (e) a Traffic Impact and Environmental Impact Assessment Consultant; and (f) a Planning Consultant to assist in the submissions to the Town Planning Board. Items (b) and (d) were funded by the pre-construction works project, while the other items were funded by internal resources of the Government. It is expected the bidding consortium will have to incur a similar, if not higher, amount in preparing their bids.

- (c) the significant risk transfer during the operational stage faced by the Contracted Party who, in order to operate the Sports Park on a self-financing basis, has to take up both the demand and commercial risks and to share its income with the Government;
- (d) the amount of initial capital investment required for commencing the operation of the Sports Park where the investment of about \$300 million to \$400 million will be required as working capital, to procure furniture, equipment and operating supplies and for pre-opening budgets, etc.; and
- (e) the lead time for attaining break-even during the initial phase of operation as the neighbouring areas in Kai Tak are not yet fully developed.

3. We are concerned that, without any special measures and incentives, **it is likely that there will not be a sufficient number of quality bids** (a minimum of three bids) **that can be attracted for the Sports Park project.** In fact, there were already similar bid incentives in some major projects overseas.

4. If the Sports Park project results in unsuccessful tendering due to an insufficient number of quality bids, we estimate that 12 to 18 months would be required for re-tendering (during which consideration may be given to the provision of incentives or a change in the procurement approach). In the case of a one-year delay in the commencement of construction works, the prices for the works to commence in 2019 will be calculated based on the latest set of price adjustment factors. Therefore, if it is the case, the project cost, in money-of-the-day (MOD) prices, is estimated to be about \$33.5 billion, which is approximately \$1.6 billion (i.e. about 5%) higher than the current estimated project cost. If the project is delayed for 18 months, the estimated project cost in MOD prices will be about \$34.3 billion, which is approximately \$2.4 billion (i.e. about 7.5%) higher than the current estimated project cost. Apart from the project cost, a delay in the delivery of the Sports Park will hinder early enjoyment of various sports facilities and open spaces by the public, cause our elite athletes to lose the opportunity to compete at the home ground, and make it impossible for major international events and activities to take place earlier in Hong Kong. All these social costs cannot be measured by just pecuniary loss.

Follow-up item 2: To cite successful examples of other countries adopting the Design-Build-Operate (DBO) approach in building a major stadium and make a comparison between the DBO approach of those projects and that of the Sports Park in terms of tendering process, operation, income, etc.;
and

Follow-up item 4: To provide an analysis, based on the DBO approach adopted by the Sports Park of how most of the risks incurred during the construction and operational stages can be transferred to the Contracted Party, and give a comparison of the pros and cons of transferring risks to the Contracted Party under

the nine procurement approaches analysed by the Operations Consultant

5. Successful examples of overseas major stadiums adopting the DBO principle for development include the SunTrust Park in Atlanta of the United States, the Rogers Place in Alberta of Canada, the York Community Stadium in York of England, the Moncton Arena in Moncton of Canada, etc.
6. A detailed comparison of our analysis of the nine procurement approaches is in the Appendix.
7. When comparing the different procurement approaches, apart from taking the market and commercial factors to attract tenderers into account, we attach great importance to whether those approaches can meet the following three criteria:
 - (a) the high degree of control over the Sports Park by the Government in order to achieve its policy objectives for sports development;
 - (b) the feasibility of transferring operating risks by the Government to the Contracted Party during the operational stage; and
 - (c) the possibility of enhancing the vibrancy of the Sports Park through the procurement approach.

At an overall level, only the following procurement approaches: (1) DBO; (2) design, build, finance and operate (DBFO); (3) design and build, then operate by private company (DB→O); and (4) design and build, then operate by Government (DB→G), are considered commercially viable and practicable. The remaining approaches, namely (5) joint venture (JV); (6) build, operate and transfer (BOT); (7) separate contracts for design, build and operate (D→B→O); (8) design and operate, then build (DO→B) and (9) appoint operator first, then design and build with operator input (O→DB), are not practicable. A comparison of the four viable procurement approaches is provided below:

- (a) capital expenditure: all four viable approaches require the Government to bear the total cost for the design and build of the Sports Park (i.e. \$31.9 billion);
- (b) operating expenditure: only the DBO approach does not require the Government to cover the expenditure while both the DB→O and DB→G approaches require the Government to bear all the expenditures, while the DBFO approach requires the Government to bear most of the operating expenditures;
- (c) operating income: under the DBO and DBFO approaches, the Government has to share its income with the Contracted Party. For the DB→O and DB→G approaches, though allowing the Government to receive the total income, there will not be much

incentive for or experience of the operator to enhance the vibrancy of the Sports Park. As a result, both the visitor flow and the utilisation rate of the Sports Park are expected to be reduced and the amount of income generated also is expected to be much lower than that of other approaches; and

- (d) operating risk: under the DBO approach, almost all operating risks will be transferred to the Contracted Party, while little or no risks will be transferred to the Contracted Party under the DB→O and DB→G approaches.

Follow-up Item 3: Whether there is a set of key performance indicators (KPIs) in place to ensure that the Contracted Party of the Sports Park will implement the sports policy objectives of promoting sports in the community, supporting elite sports and maintaining Hong Kong as a centre for major international sports events

8. The Sports Park will greatly help us to implement the three broad policy objectives: to promote sports in the community, to support elite sports and to maintain Hong Kong as a centre for major international sports events. When the operation of the Sports Park becomes stable (projected to be about three to four years of operation later), it is assumed that there will be 30 event days in the Main Stadium per year, and over a half of them are scheduled for sports events. In the multi-purpose main arena of the Indoor Sports Centre, it is assumed that there will be 17 days and 240 days per year for sports events and for community sports use respectively. As for the Public Sports Ground, it is assumed that the venue will have 17 sports event days per year, while the remaining days are for sports-related purposes only, including for school athletic meets.

9. In addition, we have prepared a series of key performance indicators to ensure that the operation approach of the Sports Park and the events organised there are mainly for the promotion of sports development. The indicators include, but are not limited to, the following key areas:

To promote sports in the community

- (a) Facilities open to the public for recreational and sports purposes
- whether various facilities (including Public Open Space, Public Sports Ground and Indoor Sports Centre) are open to the public according to the operational requirements
 - whether the Main Stadium will arrange at least 10 football matches per year according to the operational requirements
 - whether the Indoor Sports Centre will allocate no less than two-thirds of its operation time available to sports events, activities or community hiring
 - whether the Public Sports Ground and outdoor ball courts are designated for sports events, activities or community hiring

- the utilisation rate of various facilities

To maintain Hong Kong as a centre for major international sports events and to support elite sports

- (b) Utilisation/Number of visitors and event schedules
- whether competitions and events (including important competitions, international competitions and major events) held in the Sports Park can meet a satisfactory level (in terms of numbers as well as requirements of the athletes and competing teams)
 - whether the attendance of events held in various venues can meet an expected target
- (c) Turf system
- whether the quality of the turf is good enough for high-level competitions (e.g. whether scheduled sports events will be rejected or cancelled due to the turf quality of the pitch)
- (d) Floor surface of the Indoor Sports Centre
- whether the floor surface can flexibly meet the needs of different sports and the relevant standards and requirements for community use, high-level competitions and major events

To promote sports in the community, to maintain Hong Kong as a centre for major international sports events and to support elite sports

- (e) Property maintenance
- whether facilities are properly maintained, such that they can be used for various types of high-level competitions, and at the same time can be open to the public in a safe and proper manner
- (f) Customer satisfaction
- whether the public, competing teams and event organisers are satisfied with the management of facilities and venues and whether the level of satisfaction reaches a pre-determined level

*Follow-up item 5(b): Measures adopted by the Government to ensure that the Contracted Party will complete the contract;
and*

Follow-up item 6: The required amount of performance bond to be paid by the Contracted Party

10. The Home Affairs Bureau (HAB) will set up a dedicated project team to

supervise the construction of the Sports Park. Comprising professional architects, landscape architects, building services engineers, structural engineers and quantity surveyors, the team will examine the information on works submitted by the Contracted Party and take follow-up actions as appropriate to ensure that the quality of works meets necessary requirements and the works are completed on time and within budget. During the operational stage, a task force will also be set up to monitor the operation of the Sports Park. One of its tasks is to regularly review with representatives of the Contracted Party on the operational performance, business strategies and plans, with the main focus on the operational effectiveness of the Sports Park, in order to fulfil the operational requirements and achieve the KPIs laid down in the contract.

11. To ensure completion of the contract by the Contracted Party and protect the interest of both the Government and the public, we will specify in the terms and conditions of the Sports Park contract the required amount of performance bond from the Contracted Party. We initially suggest that the performance bond should be an amount equivalent to the basic operating expenditure² of the Sports Park for a period of six to nine months (totalling about \$150 million to \$200 million in the first five years, the performance bond to be updated regularly taking account of inflation), with a view to compensating the Government's loss and preventing the Contracted Party from easily giving up its role to operate the Sports Park. Moreover, the Contracted Party will have to make an initial investment of \$300 million to \$400 million in order to operate the Sports Park. The upfront performance bond provided and the investment made by the Contracted Party, as well as the estimated year-on-year increase in profits towards the end of the operating period, will help keep the Contracted Party performing well under the contract.

Follow-up item 5(c): The amount of the minimum fixed payment to be made by the Contracted Party to the Government and its calculation method

12. During the operational stage, the Contracted Party is required to operate the entire Sports Park, including community sports facilities and open space, on a self-financing basis as well as to regularly make a fixed payment to and share a percentage of its operating income (i.e. total sales) with the Government. Tenderers are required to, in accordance with the requirements set out in the tender documents, provide in their bids a fee proposal including the cost for design and construction, the fixed payment to be made to and the percentage of operating income to be shared with the Government. The Tender Assessment Panel will evaluate the bids based on a tender marking scheme³ and make recommendations to the Central Tender Board. Since the tender marking scheme is still under preparation, its details and the weighted score for each item are not available at this stage. We will provide the Public Works Subcommittee with relevant information once the tender marking scheme is ready.

² In 2025 (i.e. the third year of operation when the business performance becomes stable), the basic operating expenditure is estimated to be about \$300 million.

³ The tender marking scheme is still under preparation.

Follow-up item 5(d): The degree of discretion to be exercised by the Government in deciding on the successful tenderer

13. The HAB will set up the Tender Assessment Panel to evaluate those bids received based on a tender marking scheme, and submit evaluation results and make recommendations to the Central Tender Board for its consideration and approval. Therefore, the Government will have the sole discretion as to how the tendering exercise is processed and to decide on the successful tenderer for the project.

Follow-up item 7: The target groups (athletes, performing arts practitioners, etc.) consulted by the Government and their views on the facilities of the Sports Park

14. During the stakeholder engagement exercise for the Sports Park, our Operations Consultant has approached the Sports Federation & Olympic Committee of Hong Kong, China (SF&OC), the Hong Kong Paralympic Committee & Sports Association for the Physically Disabled (HKPC&SAPD), the Hong Kong Sports Institute (HKSI) and over 50 national sports associations (NSAs) to collect views on the project from stakeholders of the sports sector, including administrators, coaches, athletes and other sports professionals. In addition, the Task Force on the Kai Tak Sports Park under the Sports Commission and the Venues and Facilities Development Advisory Panel under the SF&OC have both provided their suggestions and views on the project. Members of the two bodies include, among others, retired athletes and representatives from local NSAs and the music sector.

15. Moreover, during the two-month public engagement exercise last year, we liaised with a number of athletes, coaches and NSA representatives through the HKSI and local NSAs. Among them, there were athletes Mr WU Siu-hong (Tenpin Bowling), Ms GENG Xiao-ling (Wushu) and Ms YIP Pui-yin (Badminton); coach Mr CHOI Yuk-kwan, Tony (Squash) and NSA representative Mr Wilfred NG (Volleyball and Handball). They all supported the early construction of the Sports Park and considered that the Sports Park could attract international events to be held in Hong Kong, thus facilitating the development of sports.

16. Generally speaking, stakeholders have high expectations for the Sports Park and urged the Government to take it forward as soon as possible. Among others, more specific views and suggestions from them include increasing the seating capacity in the Indoor Sports Centre, providing enough parking lots for coaches of sports teams and paying attention to the possible noise from the Public Sports Ground during its design stage. Also, stakeholders of the entertainment industry expected a venue with a minimum seating capacity of 35 000 in Hong Kong to attract international and regional entertainment events to be held in Hong Kong and to maintain Hong Kong's competitiveness. They also hoped that the rent for venues there could be set at a reasonable level. Taking into account views collected during the consultation period, we revised the reference design and the project scope of the Sports Park to increase the number of seats in the main arena of the Indoor Sports

Centre from 4 000 to 10 000; to provide a flexible turf system and to allow stage positioning in the multi-purpose Main Stadium to cater for the needs of sports and non-sports events; to extend the cover over the spectator stands in the Public Sports Ground, etc.

17. We conducted the two-month public engagement exercise as mentioned above between May and July 2016. During the period, we collected views from the public and stakeholders through questionnaire surveys, online survey forms, briefing sessions for relevant organisations (including District Councils of areas adjacent to the Sports Park site, concern groups for persons with disabilities and the Task Force on Kai Tak Harbourfront Development of the Harbourfront Commission), as well as attending an industry consultation session held by a Member of the Legislative Council (LegCo). After the public engagement exercise, about 6 500 completed questionnaires were received. The majority (90%) of the respondents “wished” or “strongly wished” to see the early implementation of the Sports Park. Apart from questionnaires, we received around 90 letters and emails from the public, the sports sector, a LegCo Member and professional bodies. They all supported the early delivery of the Sports Park project.

18. Both the Report on Stakeholder Engagement and the Report on Public Engagement Exercise have been uploaded to the dedicated website (www.KaiTakSportsPark.hk) of the project for Members’ reference.

Kai Tak Sports Park: Comparison of different financial/procurement models

Procurement model	Revenue and costs of the Government and Contracted Party ¹	Government's degree of control	Transfer of risks during operation stage	The Sports Park's vibrancy and income level	Relevant examples, and pros and cons
<p>1. Design-Build and Operate (DBO)</p>	<p>Government</p> <ul style="list-style-type: none"> ● Capital expenditure (Capex): Design & Build (D&B) cost about \$31.9 billion ● Operating expenditure (Opex): 0 ● Operating income: minimum fixed payment + gross income sharing <p>Contracted Party</p> <ul style="list-style-type: none"> ● Works contract profit: \$500 million(m) to \$800m² ● Capex: about \$300m to \$400m ● Opex:100% (estimated) 	<p>High</p> <p>Government will have full ownership under this option, and through key performance indicators (KPIs) and other terms in the contract the Government monitors the performance of the Contracted Party during operation stage to ensure our sports policy objectives</p>	<p>High</p> <p>Transferring all commercial risks to the Contracted Party during the operation stage.</p>	<p>High</p> <p>Highly motivates the private sector to promote, to attract events and patronage to create a vibrant precinct and drive the overall income.</p>	<ul style="list-style-type: none"> ● Environmental Protection Department and Draining Services Department adopted this procurement model for their sludge treatment facilities, organic resources recovery centre, development of integrated waste management facilities and upgrading of Pillar Point sewage treatment works. ● There have been other successful overseas DBO examples for large sports projects including: SunTrust Park in Atlanta of the United States, Rogers Place in Alberta of Canada, York Community Stadium in York of England, and Moncton Arena in Moncton of Canada.

¹ In this column, those colored **red** represent expenditure items and those colored **green** represent income items.

² According to consultancy study on profit margin conducted by the Development Bureau, the profit margin of the local contractors in the public works contract is about 2% to 3%. In the Capex of \$31.9 billion, it is estimated that works contract value of Contracted Party is about \$27 billion (i.e. paragraph 14 (a) to (h) of the LC paper no. PWSC (2017-18)2), and the remaining Capex such as consultancy fee for contract administration, salary for resident site staff and contingency does not belong to the Contracted Party (i.e. paragraph 14 (i) to (l) of the LC paper no. PWSC (2017-18)2). Therefore, assuming a profit margin of about 2% to 3%, the profit of the works contract with Contracted Party is about \$500m to \$800m.

Procurement model	Revenue and costs of the Government and Contracted Party ¹	Government's degree of control	Transfer of risks during operation stage	The Sports Park's vibrancy and income level	Relevant examples, and pros and cons
	<p>to be about \$9.6 billion for the 20-year operating period) and fixed payment to Government</p> <ul style="list-style-type: none"> ● Operating income: gross income sharing with the Government 	are achieved.			<ul style="list-style-type: none"> ● DBO model ensures that the D&B fully caters to the needs of the operator. ● Although it is estimated that the Contracted Party generates \$500m to \$800m in contract margin profit, at the same time it needs to inject \$300m to \$400m³ in capital investment, for Furniture and Equipment (F&E) and start-up costs for operating the Sports Park. It also needs to provide an operating performance bond which represents 6-9 months of basic operating expenses (i.e. about \$150m to \$200m). ● As the Sports Park is substantial in size, involves multipurpose venues that support sports, commercial and community activities, bid costs are estimated to be around \$100m to \$200m. We recommend providing bid incentives to unsuccessful bidders.

³ Under other scenarios this capital expense of \$300m - \$400m is the responsibility of different parties, for instance, under the DB->G model, Government will be fully responsible for this investment. Under DB->O model, Government will have a majority of the responsibility for this investment. Under DBFO model, the Contracted Party will be responsible for this investment.

Procurement model	Revenue and costs of the Government and Contracted Party ¹	Government's degree of control	Transfer of risks during operation stage	The Sports Park's vibrancy and income level	Relevant examples, and pros and cons
<p>2. Design, Build, Finance, and Operate (DBFO)</p>	<p>Government</p> <ul style="list-style-type: none"> ● Periodic fixed payment: equal to D&B cost (\$31.9 billion) + financing principal and interests + minimum equity return, and most of recurrent expenses ● Opex: absorb a large portion of recurrent expenses through periodic fixed payment ● Operating income: sharing with Contracted Party <p>Contracted Party</p> <ul style="list-style-type: none"> ● Capex: advanced payment for D&B costs + financing cost (principal and interests), but will be fully reimbursed in the form of periodic payments from the Government ● Capex: about \$300m to 	<p>Medium to High</p> <p>Government has not started any payment during the D&B stage, and has relatively less control during the Build stage.</p> <p>Government will monitor the operator using KPIs to ensure hardware and operations meet Government's objectives.</p>	<p>Low to Medium</p> <p>Government's periodic payment already offsets operator's financing cost and a large portion of recurrent expenses, so little risk is transferred.</p>	<p>Medium to High</p> <p>Periodic payment already guarantees the major income for the operator. Therefore, to a certain degree, it diminishes the incentives the operator has to promote the precinct.</p>	<ul style="list-style-type: none"> ● Hong Kong has never adopted the DBFO model. ● This model which defers the capital payments over the operating period has been used in major arena projects in Australia and the UK. Singapore Government first used this model in Singapore Sports Hub project, and one of the purposes was to promote/develop debt financing in Singapore. ● This model involves complex debt financing and equity structure. Hong Kong has limited experience in this area. ● A government body who had adopted this model indicated that this model was not totally ideal, as the Government's participation during D&B was limited, making it difficult to fully achieve its policy objectives. Financing, debt and equity structure was complicated and it caused dispute amongst members of the Contracted

Procurement model	Revenue and costs of the Government and Contracted Party ¹	Government's degree of control	Transfer of risks during operation stage	The Sports Park's vibrancy and income level	Relevant examples, and pros and cons
	<p>\$400m</p> <ul style="list-style-type: none"> ● Opex: responsible for a small portion of Opex ● Operating income: sharing with the Government 				Party.
<p>3. Design and Build first and then private sector to operate (DB → O)</p>	<p>Government</p> <ul style="list-style-type: none"> ● Capex: D&B cost about \$31.9 billion ● Opex: estimated to be about \$9 billion for the 20-year operating period ● Management fee: about \$280m over the 20-year operating period ● Operating income: 100%; if there is an incentive scheme and the conditions are met, then there will be income or profit sharing with the operator <p>D&B contracted party</p> <ul style="list-style-type: none"> ● Works contract 	<p>High</p> <p>Government has full ownership.</p>	<p>Low</p> <p>Government assumes full income risks and risk of increase of management fee.</p>	<p>Low to Medium</p> <p>Minimal incentives for operators to maximize vibrancy as management fee already covers basic expenses of the operator and a level of their profit.</p>	<ul style="list-style-type: none"> ● Example: Hong Kong Stadium (management contract with Wembley International, UK). ● It is relatively common to outsource the management of the standard sports facility (such as community indoor sports centre). However, as the Sports Park is substantial in size, involves multi-purpose venues that support sports, commercial and community activities, without operator input into design, it may lower the chance for a successful operation, and lead to future disputes with the operator in terms of usability of hardware. ● Operators are expected to have reduced appetite to take up operating risks, since they did not take part in

Procurement model	Revenue and costs of the Government and Contracted Party ¹	Government's degree of control	Transfer of risks during operation stage	The Sports Park's vibrancy and income level	Relevant examples, and pros and cons
	<p>profit: \$500m to \$800m</p> <p>Outsourced operator</p> <ul style="list-style-type: none"> ● Capex: 0 ● Opex : 0 ● Operating income : 0 ● Management fee: about \$280m over the 20-year operating period and if there is an incentive scheme and the conditions are met, then there will be income or profit sharing from the Government 				<p>D&B stage. This effectively means that Government would likely need to pay a management fee and assume all operating risks. Also, if the project cannot attract one single party to bid, and the Government would need to split the contracts, much manpower and resources would be needed to resolve any disputes thereby creating additional monitoring and management requirements for Government. Also, separate out different operating contracts means that no party would step forward and help promote the Precinct as a whole.</p> <ul style="list-style-type: none"> ● Operator has reduced incentives to attract usage if receiving a fixed fee that guarantees a level of income, but to some extent be motivated with incentive terms.

Procurement model	Revenue and costs of the Government and Contracted Party ¹	Government's degree of control	Transfer of risks during operation stage	The Sports Park's vibrancy and income level	Relevant examples, and pros and cons
4. Design and Build first and then Government to operate (DB→G)	<p>Government</p> <ul style="list-style-type: none"> ● Capex: D&B cost about \$31.9 billion ● Opex: estimated to be about \$9.2 billion⁴ over the 20-year operating period ● Operating income: 100%; operating income will be much lower when compared to private sector management <p>D&B contracted party</p> <ul style="list-style-type: none"> ● Works contract profit: \$500m to \$800m 	<p>High</p> <p>Government has full ownership.</p>	<p>None</p> <p>The Government cannot transfer any commercial risks.</p>	<p>Low</p> <p>Government has to work under established procurement rules and regulations in managing the precinct which offers limited flexibility in responding to changing market needs.</p>	<ul style="list-style-type: none"> ● Examples: Hong Kong Stadium, Hong Kong Coliseum, Queen Elizabeth Stadium and most community sports and recreation facilities use this model. ● Leisure and Cultural Services Department (LCSD) is mainly responsible for facilities management, and is not good at using market-oriented means to promote facilities (e.g. food and beverage, corporate hospitality, advertising and sponsorship). In fact, there is no expertise within Government in operating commercial facilities and the Government has to work under established procurement rules and regulations in managing the commercial facilities which offers limited flexibility in responding to changing market demand and needs.

⁴ Under DB→G model, Opex is slightly less than that under DBO model (under DBO model, Opex for the 20-year operating period is estimated to be about 9.6 billion) because the number of events organized is lesser under the operation of the Government and hence the related expenses are lower.

Other options considered but not viable

Procurement model	Revenue and costs of the Government and Contracted Party	Government's degree of control	Transfer of risks	The Sports Park's vibrancy	Relevant examples
5. Joint Venture (JV)	<p>Government</p> <ul style="list-style-type: none"> ● Capex: over 95% of D&B costs (about \$30.3 billion) ● Opex / income: 0 ● Income: Dividends after deducting all expenditures <p>JV parties</p> <ul style="list-style-type: none"> ● Capex: not more than 5% of D&B cost (about \$1.6 billion) ● Opex: 100% ● Income: Dividends after deducting all expenditures ● Other income: some partners may request the JV to pay its parent company corporate management fee and other expenses; can receive dividends only after deducting all expenditures 	<p>Medium</p> <p>The Government and JV parties co-own and manage the Sports Park.</p> <p>Although the Government will have most of the share, since the JV partner is responsible for operating the Sports Park, the JV would also have a large degree of control.</p>	<p>Medium to High</p> <p>The JV assumes commercial risks during operating period.</p>	<p>High</p> <p>Private sector has adequate incentives to promote and attract events and increase usage.</p>	<ul style="list-style-type: none"> ● Examples: Hong Kong Disneyland and AsiaWorld-Expo. For Disneyland, operating recurrent expense include fees paid to the parent company of the contracted party. ● As compared to exhibition and tourist facilities, the Sports Park is a social infrastructure project having a role in promoting sports. The investment return of the Sports Park is unlikely to be attractive enough for the private sector. Even if they are willing to invest, it is estimated that it will not be over 5% of the construction cost. Therefore, this option is not viable.

Procurement model	Revenue and costs of the Government and Contracted Party	Government's degree of control	Transfer of risks	The Sports Park's vibrancy	Relevant examples
6. Build, Operate and Transfer (BOT)	<p>Government</p> <ul style="list-style-type: none"> ● Capex: 0 ● Opex: 0 ● Operating income: 0% (under some contracts there might be a small share of income) <p>Contracted Party</p> <ul style="list-style-type: none"> ● Capex: D&B cost about \$31.9 billion ● Opex: 100% ● Operating income: 100% (under some contracts there might be a small share of income to be given to the Government) 	<p>Low</p> <p>The Contracted Party is entirely responsible during the BOT period. Government's control is limited.</p>	<p>High</p> <p>Contracted party assumes all commercial risks.</p>	<p>High</p> <p>There is adequate incentive for the Contracted Party to promote and attract events and increase usage.</p>	<ul style="list-style-type: none"> ● Examples: tunnels, tolled bridges which provide steady income streams adopted this model. Phase 1 of the Hong Kong Convention and Exhibition Centre also adopted this model. ● Not a viable option in the absence of market interest as the cashflows generated by the Sports Park project are not sufficient to provide an attractive return on investment to the private sector.
7. Separate contracts for Design, Build, Operate (D→B→O)	<p>Government</p> <ul style="list-style-type: none"> ● Capex: D&B cost about \$31.9 billion ● Opex: estimated to be about \$9 billion for the 20-year operating period ● Management fee: about \$280m over the 20-year operating period ● Operating income: 100% and if there is an incentive scheme and the conditions are met, 	<p>High</p> <p>Government has full ownership.</p>	<p>Low</p> <p>Government assumes full income risks and risk of increase of management fee</p>	<p>Low to Medium</p> <p>Inadequate incentive for operator to promote, attract events and increase usage since they already receive</p>	<ul style="list-style-type: none"> ● Some LCSD's indoor sports centres have adopted this model (i.e designed by Architectural Services Department, built by contractor and operation outsourced by LCSD). ● This model may be suitable for standard sport facilities but as the Sports Park is substantial in size, involves multipurpose venues that support sports, commercial and community activities, without

Procurement model	Revenue and costs of the Government and Contracted Party	Government's degree of control	Transfer of risks	The Sports Park's vibrancy	Relevant examples
	<p>then there will be income or profit sharing with the operator</p> <p>Contracted Party</p> <ul style="list-style-type: none"> ● Capex: 0 ● Opex: 0 ● Operating Income: 0 ● Management fee: about \$280m over the 20-year operating period ; if there is an incentive scheme and the conditions are met, then there will be income or profit sharing with the operator 			management fee covering their basic expenditure and profit.	<p>builder's input into the design, the constructability, especially for complex structures, is exposed to high risk of time and cost overrun. Therefore, it is not a viable option.</p> <ul style="list-style-type: none"> ● Without operator's input into design, it may lower the chance for a successful operation, and lead to future disputes with the operator in terms of usability of hardware.
8. Design with Operator in the team, then build and separate operation agreement (DO→B)	<p>Government</p> <ul style="list-style-type: none"> ● Capex: cost for D&B design blueprint, and D&B cost (about \$31.9 billion) ● Opex: 0 ● Operating income: minimum fixed payment + gross income sharing <p>Operator</p> <ul style="list-style-type: none"> ● Capex: about \$300m to \$400m 	<p>High</p> <p>Government has full ownership.</p>	<p>High</p> <p>Operator assumes all commercial risks during operating period.</p>	<p>High</p> <p>There is adequate incentive for the Contracted Party to promote, attract events and increase usage.</p>	<ul style="list-style-type: none"> ● Not a viable option as without builder's input into the design, the constructability, especially for complex structures, is exposed to high risk of time and cost overrun. ● May lead to capital cost overruns as designer would seek to satisfy operator's demand over capital cost control.

Procurement model	Revenue and costs of the Government and Contracted Party	Government's degree of control	Transfer of risks	The Sports Park's vibrancy	Relevant examples
	<ul style="list-style-type: none"> ● Opex: 100%, and pay fixed payment to Government ● Operating income: gross income sharing with Government 				
<p>9. Appoint Operator, then carry out design and build under Operator's direction (O→DB)</p>	<p>Government</p> <ul style="list-style-type: none"> ● Capex: cost for operator's user requirement and D&B cost (about \$31.9 billion) ● Opex: 0 ● Operating income: minimum fixed payment + gross income sharing <p>Operator</p> <ul style="list-style-type: none"> ● Capex: about \$300m to \$400m ● Opex: 100%, and pay fixed payment to Government ● Operating income: gross income sharing with Government 	<p>High</p> <p>Government has full ownership.</p>	<p>High</p> <p>Operator assumes all commercial risks.</p>	<p>High</p> <p>There is adequate incentive for the Contracted Party to promote, attract events and increase usage.</p>	<ul style="list-style-type: none"> ● Not a viable option as no operator will have the capability or appetite to enter into a contract when the design is not known. ● May lead to capital cost overruns as designer would seek to satisfy operator's demand over capital cost control.