Consultative Committee on the
Core Arts and Cultural Facilities of the
West Kowloon Cultural District

Financial Matters Advisory Group

<u>Report to the Consultative Committee</u>

May 2007

**CONSULTATIVE COMMITTEE ON THE
CORE ARTS AND CULTURAL FACILITIES OF THE
WEST KOWLOON CULTURAL DISTRICT**

FINANCIAL MATTERS ADVISORY GROUP

REPORT TO THE CONSULTATIVE COMMITTEE

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EXECUTIVE SUMMARY

(**<u>Important Note</u>** : All figures in this Executive Summary and in the main text of this Report are in terms of **net present value (NPV) at year 2006** unless otherwise indicated.)

The Financial Matters Advisory Group (FMAG) has assessed the financial implications of the development and operation of the West Kowloon Cultural District (WKCD) project with the assistance of an external financial advisor (FA) appointed by the Government. The FA has conducted a detailed financial study on the development and operation of the WKCD.

Limited Market Potential for Life-Cycle Public Private Partnership Arrangements

2. The financial study conducted by the FA indicates that none of the arts and cultural facilities recommended for the WKCD by the Performing Arts and Tourism Advisory Group (PATAG) and the Museums Advisory Group (MAG) would be able to recover the cost of operations and maintenance as well as the capital costs. Of the fifteen performing arts venues and the museum and exhibition venues recommended, only two venues, namely, the Mega Performance Venue and the Exhibition Centre would be expected to generate an operating surplus, but the surplus would not be able to recover the capital costs. There is therefore very limited scope for the private sector to take the lead in the development or operation of the facilities in the form of life-cycle public private partnership (PPP) arrangements, if no public subsidies are provided. There is also a lack of competent market players that are capable of both constructing and operating the arts and cultural facilities. Private sector participation is likely to be limited to service contracts and leases.

3. These findings coincide with relevant local and overseas experiences in that arts and cultural facilities development and operation invariably require significant levels of public subsidy. Where private capital is contributed, it is usually in the form of

donations and sponsorship.

Financial Implications of the WKCD Project

Capital Costs and Operating Deficits

4. In view of the limited scope for the WKCD project to adopt a life-cycle PPP approach requiring the private sector to finance the development and maintenance of the facilities and to operate the facilities over a long period of time, the FMAG has focused on the financial assessment of a development approach which involves the private sector mainly through Design and Build contracts, similar to the conventional mode adopted for delivering Public Works Programme projects, while the operation, maintenance and management (OMM) of the completed facilities would be undertaken by different private sector parties to specified level of performance under OMM contracts let by the public sector or the proposed WKCD Authority, i.e. the outsourcing mode. Under this approach, referred to as PSI Scenario 1A in the main text of this Report, and assuming a 50-year project period starting from design and construction in 2010 till 2059 (cost for masterplanning is assumed to incur from 2008), the estimated capital costs and operating deficits for the WKCD (excluding residential, hotel and commercial developments) are summarised as follows:

(a) **<u>Capital costs</u>** - **$21.6 billion**. This includes the development costs (including the initial collection costs and capitalised annual collection costs for the **M+**) and major overhauls/renovation of all the recommended core arts and cultural facilities (CACF) and other arts and cultural facilities (OACF), transport and communal facilities and engineering works as well as the costs of the proposed WKCD Authority incurred during the development stage of the WKCD.

(b) **<u>Operating deficits</u>** (net of operating revenue) - **$8.4 billion**. This includes the operating deficits of the same facilities referred to in (a) above and the operation costs of the WKCD Authority incurred during the operation stage.

(c) **<u>Total capital costs and operating deficits</u>** - **$30 billion**

5. In other words, an upfront investment of $30 billion (NPV at year 2006) would be required to develop and operate the WKCD for a project life of 50 years from 2010 till 2059, assuming that the investment return is equal to the nominal discount rate used for calculating the NPV of the capital costs and operating deficits and that the timing and magnitude of the estimated cash flows are realised as projected in the financial assessment.

Land Premium

6. The WKCD will be an integrated development with residential, hotel and commercial facilities in addition to the arts and cultural and communal facilities. Within the WKCD, the land revenue generated from the development of the residential, hotel and commercial facilities would be an important source of funding for the development and operation of the loss-making arts and cultural facilities. The development of residential, hotel and commercial facilities are, however, constrained by the development parameters proposed by the Government in October 2005 which set an overall plot ratio for the WKCD at 1.81 and a cap on residential development Gross Floor Area (GFA) at 20% of the total GFA of the WKCD (October 2005 Package). In addition, the Planning Department has proposed to impose building height restrictions of 50-100 metres Principal Datum (PD) based on Chapter 11 of the Hong Kong Planning Standards and Guidelines promulgated in November 2003. Taking all these constraints and parameters into consideration, the land premium of the residential, hotel and commercial sites (at a total GFA of 377,866 sq. m.) is estimated at about $21 billion by the FA.

7. The FMAG reckons that a $9 billion funding gap would

undermine the financial viability of the WKCD; it would also be difficult to appeal for public support. The FMAG has thus sought a steer from the Consultative Committee on the CACF of the WKCD (Consultative Committee). The Consultative Committee advised that the development parameters proposed in October 2005 should remain unchanged and that the WKCD should be developed and operated within its means. Taking into account the advice of the Consultative Committee, the FMAG has considered different ways to reduce the funding requirement and to finance the project with a view to making the WKCD development financially self-sufficient and sustainable within its 40-hectare land resources.

Financing Options for the WKCD Project

8. In considering the various options to finance the WKCD project, the FMAG subscribes to the following guiding principles, which were subsequently agreed by the Consultative Committee-

(a) Provide funding stability conducive to arts and cultural development;

(b) Preserve maximum flexibility to create a cultural hub of international status;

(c) Ensure early delivery of the project; and

(d) Affordable to the Government and ensure the CACF are financially sustainable.

9. The FMAG has considered various options identified by the FA, namely-

(a) Government endowment to support the development and operation of the WKCD;

(b) Government endowment and vesting of commercial sites for retail/dining/entertainment (RDE) facilities with the WKCD Authority;

(c) Public Works Programme and annual subvention;

(d) Government endowment together with part of land premium; and

(e) Land premium supplemented by Government endowment.

Recommended Financing Option

10. Taking account of the above guiding principles and views expressed in the early stages of the WKCD development, including those contained in the Legislative Council (LegCo) Subcommittee on WKCD Development's reports, as well as the preference indicated by the Consultative Committee in its advice to the FMAG, the FMAG considers that the best way to finance the WKCD is to meet its capital costs through an upfront endowment appropriated by LegCo roughly equivalent to the estimated land revenue from the residential, hotel and office part of the commercial sites within the WKCD and to vest the RDE part of the commercial sites with the WKCD Authority to provide a steady source of recurrent income through rental proceeds to meet the operating deficits of the CACF. In practice, after a master plan for WKCD has been drawn up laying out the footprint for the CACF and residential, hotel and commercial developments, the WKCD Authority will develop and manage the CACF and the RDE facilities which should be integrated with the CACF, the WKCD Authority will not be involved in the disposal of the residential, hotel and office sites. These sites will be disposed of by the Government under the normal land sale mechanism.

11. The preferred financing option would have met the objective of meeting the operating requirements of the CACF on a self-sufficient and sustainable basis, but still leaving a funding

gap in terms of capital costs of $7.7 billion [Note 1].

Recommended Measures to Bridge the Funding Gap

12. After considering a number of sensitivity tests conducted by the FA and taking into account the views of the PATAG and the MAG as well as the Consultative Committee's steer, the FMAG recommends the following measures which together will remove the capital cost funding gap by reducing costs and increasing land revenue-

(a) Reduce the on-site Net Operating Floor Area (NOFA) of **M+** by 30% (and off-site NOFA by 12.5%) and fine-tune the phasing of the development of the scaled down **M+** in a 70%/30% (Phase 1/Phase 2) ratio; all the off-site area (storage and conservation laboratory) will be developed in Phase 1;

(b) Reduce the NOFA to GFA ratio of **M+** from 1:1.67 to 1:1.5 and that of all performing arts facilities from 1:1.5 to 1:1.4;

(c) Reduce the timeframe for the architectural design for the **M+** through organizing a competition by invitation instead of an open competition, and introduce architectural design competition by invitation for the iconic performing arts facilities, i.e. the Xiqu Centre and the Concert Hall/Chamber Music Hall;

(d) Reduce the scale of hotel development by one-third and RDE development by 20%; but there should be flexibility as to whether the 28,000 sq. m. hotel GFA (i.e. one-third of the total hotel GFA) should be allocated for office development, so that the appropriate hotel/office

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[Note 1] The financial impact of vesting the RDE sites with the WKCD Authority is twofold – (a) the capital costs will be increased by $3.1 billion for developing the RDE facilities, and (b) land revenue will be reduced by $3.9 billion after discounting the RDE land premium forgone. The resultant funding gap in terms of capital costs after taking into land revenue into account is $7.7 billion (i.e. capital costs : $24.7 billion ($21.6 billion + $3.1 billion) minus land revenue : $17 billion ($20.9 billion - $3.9 billion) = $7.7 billion).

mix could be decided by market forces when the land is sold;

(e) Allocate all the GFA released from the above measures for office development [Note 2]; and

(f) Remove WKCD Authority's financial responsibility for transport and communal facilities and engineering works supporting the entire WKCD project area except public open space, car parks and automated people mover (APM).

Funding Requirement under the Recommended Financing Option

13. Combining the recommended financing option with the above recommended measures will reduce the capital costs to $19.2 billion and the land revenue to $18.9 billion. The capital cost funding gap is therefore virtually removed. In other words, an upfront endowment of about **$19 billion** (NPV at year 2006) would be required for the WKCD to be developed and operated in a self-sufficient and sustainable manner within the 40-hectare WKCD site.

Economic Impact Assessment

14. The WKCD is the largest single arts and cultural project Hong Kong has ever planned and a substantial investment in arts and cultural development. The project not only involves construction of a cluster of arts and cultural facilities together with supporting infrastructure and communal facilities, it also provides tremendous opportunities for the development of the arts and cultural software and the creative industries. The FMAG has requested the Government Economist to conduct an economic impact assessment (EIA) on the WKCD in order to gauge the wider

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[Note 2] There is longer term potential for West Kowloon to develop into a Grade A offices development node outside the Central Business District.

economic impact of the WKCD on Hong Kong. The findings of the EIA indicate that the WKCD will generate substantial tangible economic benefits such as value added contribution to the Gross Domestic Product (GDP), employment creation and benefits to the tourism industry. In addition, the WKCD will also generate significant intangible benefits such as fostering vibrant cultural activities and the development of a creative economy, raising quality of life, branding Hong Kong as a world city, etc. The FMAG agrees with the EIA conclusion that the WKCD is a strategic investment for Hong Kong and that in justifying the investment of the WKCD development, the Consultative Committee should also take into account its wider economic impact on Hong Kong as a whole.

CHAPTER 1 – INTRODUCTION

Establishment of the Financial Matters Advisory Group

1.1 In April 2006, the Government set up the Consultative Committee on the Core Arts and Cultural Facilities of the West Kowloon Cultural District ("the Consultative Committee") to re-examine and reconfirm, as appropriate, the need for the Core Arts and Cultural Facilities (CACF) of the WKCD and the financial implications of developing and operating these facilities. Three Advisory Groups were set up under the Consultative Committee, namely, the Performing Arts and Tourism Advisory Group (PATAG), the Museums Advisory Group (MAG) and the Financial Matters Advisory Group (FMAG).

1.2 The role of the FMAG is to advise the Consultative Committee on the financial implications of developing and operating the arts and cultural facilities recommended by the other two advisory groups. The terms of reference and membership of the FMAG are at **Annex 1** and **Annex 2** respectively.

Modus Operandi of the FMAG

1.3 To facilitate the work of the FMAG, Home Affairs Bureau (HAB) appointed GHK (Hong Kong) Limited as the Financial Advisor (FA). The FA has conducted a detailed financial study to assess the financial implications of the WKCD project. The FA has fielded a strong multi-disciplinary team to work on the consultancy. Its team consists of financial experts, public private partnership experts, performing arts venue and museum advisors and architects, engineering experts, quantity surveyors and land and property market specialists.

1.4 In estimating the costs and revenues of developing and operating the CACF, the FA has made reference to relevant local facilities as well as comparable overseas facilities. The FA has worked closely with HAB and relevant bureaux and departments in coming up with very detailed assumptions underlying the estimation of the capital costs and the operating costs and revenue of the various facilities of the WKCD. The FA submitted its findings periodically to the FMAG and attended FMAG meetings to seek Members' views and advice on its findings. A list of the FMAG meetings is at **Annex 3**.

Guiding Principles

1.5 The FMAG has been undertaking its work in accordance with the following guiding principles-

(a) the Government's objective of commissioning the WKCD project is to develop a world-class integrated arts and cultural district to meet public aspirations, with a balanced mix of various arts, cultural, entertainment, commercial and residential facilities;

(b) the project area on the West Kowloon Reclamation would continue to be designated for the development of a Cultural District;

(c) the Government would continue to explore Public Private Partnership (PPP) in taking forward the WKCD project with a view to bringing in market creativity and vibrancy, facilitating diversity in arts and culture, sharing financial risk with the private sector and ensuring the sustainable operation of the Cultural District; and

(d) the Government intends to set up an independent statutory body (WKCD Authority) to take forward the WKCD project, which is in line with the Culture and Heritage Commission's recommendations that emphasis should be given to the principles of "people-oriented", "partnership" and "community driven" in the development of the WKCD.

Recommendations of PATAG and MAG

1.6 The FMAG took note of the recommendations of the PATAG and the MAG as contained in their reports submitted to the Consultative Committee on 7 September 2006 and 23 November 2006 respectively. A summary of their recommendations is at **Annex 4**.

Development Parameters

1.7 In response to public views, the Government proposed in October 2005 additional development parameters ("the October 2005 Package") for the WKCD project under the Invitation for Proposals (IFP) process. The FMAG was tasked to assess the financial implications of the proposed arts and cultural facilities strictly on the basis of these development parameters including the following-

(a) setting the maximum overall plot ratio for the whole WKCD site at 1.81, giving a total GFA of about 726,000 sq. m.;

(b) capping the residential development at no more than 20% of the total GFA of the WKCD.

1.8 In addition, new building height restrictions for developments in the WKCD have been proposed by the Planning Department based on Chapter 11 of the Hong Kong Planning Standards and Guidelines (HKPSG) promulgated in November 2003. The proposed building height restrictions range from 50 to 100 metres PD and have been taken as part of the development parameters for the purpose of financial assessment. These proposed building heights are more stringent than those in the IFP (launched before Chapter 11 of the HKPSG was promulgated) which allowed building heights of up to 130 metres PD under the Canopy and further building height flexibility at the Commercial Gateway outside the Canopy.

Constraints and Limitations

1.9 In carrying out its task, the FMAG has to operate with two major constraints. First, the CACF facilities to be provided in the WKCD should be based on those recommended by the PATAG and the MAG as contained in their respective reports submitted to the Consultative Committee. Secondly, the development parameters (i.e. upper plot ratio limit, GFA cap on residential land use, etc.) should be based on those contained in the Government's October 2005 Package. These naturally have significant implications for the estimated revenue and expenditure over the project period.

1.10 It is also important to note that, at this stage, without any master layout plan (MLP) for the WKCD, designs of the various facilities, framework of future mode of operation of the facilities, or any specific PPP arrangements to be adopted, the estimation of the financial implications inevitably has to be based on a number of key assumptions. As such, the estimated financial implications presented in this report are broad estimates and should be considered in this light. The estimates will need to be adjusted in the context of detailed planning and in the light of changing circumstances.

CHAPTER 2 – KEY ASSUMPTIONS AND METHODOLOGY

Key Assumptions

2.1 The financial analysis has been conducted on the basis of the CACF recommended by the PATAG and the MAG, the development parameters set out in the October 2005 Package and other relevant requirements set out in the IFP. To conduct the financial analysis, the FA has worked out a number of assumptions in consultation with relevant Government bureaux and departments. The key assumptions include the following:

(a) the development mix in the WKCD site;

(b) clustering of performing arts venues;

(c) operating assumptions of the arts and cultural facilities; and

(d) the financial parameters used in the financial assessment.

Further details of these assumptions are given below.

(a) <u>Initial Development Mix</u>

2.2 The initial development mix for the WKCD has been drawn up having regard to the development parameters described in Chapter 1, relevant international comparators, the recommendations of the PATAG and the MAG on the arts and cultural facilities, as well as the commercial and hotel facilities that are considered suitable for creating an integrated Cultural District. The initial development mix is as follows –

Development Mix	**GFA (m^2)**	**% of Total GFA**
M+ Note 3	98,530	13%
Exhibition Centre	12,500	2%
Performing Arts Venues	202,389	28%
Subtotal (CACF)	**313,419**	**43%**
Other Arts and Cultural Uses	15,000	2%
Communal Facilities	20,000	3%
Sub-total	**35,000**	**5%**
Residential: Villa Houses & Apartments	145,257	20%
Hotels	84,000	12%
Retail, Dining & Entertainment (RDE)	148,609	20%
Sub-total	**377,866**	**52%**
Total	**726,285**	**100%**

Remarks:

- Storage and conservation laboratory for **M+** with a NOFA of 16,000 sq. m. (GFA of 19,200 sq. m. using a NOFA/GFA conversion factor of 1:1.2) are to be provided off-site.
- No office development has been assumed by the FA in view of the overall abundant supply of Grade A office premises in the short term and the potential competition from new office developments near the WKCD. However, in the longer term, providing prime offices in WKCD would support the growth of Hong Kong as an international financial and commercial centre and help develop the area into a decentralized office node on the Kowloon side. It would also provide an essential base load of weekday consumers for the RDE facilities.

Note 3 On-site portion.

(b) ***<u>Clustering of Performing Arts Venues and Integration with Commercial Facilities</u>***

2.3 The PATAG recommended that a few of the performing arts venues should be stand-alone structures due to their function, iconic design and specific image. These include the Mega Performance Venue, the Xiqu Centre, the Great Theatre 1 and the Concert Hall and Chamber Music Hall (the last two facilities should be co-located). The PATAG also indicated that the remaining facilities should be suitably clustered to achieve synergy and efficiency gains, but stopped short of making any specific recommendation on the exact clustering pattern. The PATAG, however, recommended that the medium-sized theatres and blackbox theatres should be integrated with commercial facilities. Taking into account the PATAG's recommendations, the performing arts facilities have been categorized into several clusters as follows for the purpose of financial assessment-

Phase 1 Clusters :

- (i) Mega Performance Venue
- (ii) Great Theatre 1
- (iii) Concert Hall and Chamber Music Hall
- (iv) Xiqu Centre (consisting of one large and one small theatre)
- (v) Medium-sized Theatre 1
- (vi) Medium-sized Theatre 2 and Blackbox Theatre 1
- (vii) Blackbox Theatres 2 and 3
- (viii) Blackbox Theatre 4
- (ix) Piazzas (including a small canopy as recommended by PATAG)

Phase 2 Clusters :

- (x) Great Theatre 2 and Medium-sized Theatre 3
- (xi) Medium-sized Theatre 4

(c) Operating Assumptions of the Arts and Cultural Facilities

2.4 The operating assumptions adopted by the FA have taken into account the recommendations of the PATAG and the MAG as well as local and international comparators. The key operating assumptions are highlighted below.

M+

- Start up collection costs at $1 billion and annual collection costs at $20 million
- Programming costs at 33% of annual total operating expenditure
- Visitor number targetted at 1.5 million per annum initially, reaching 2.5 million per annum after 15 years of operation (Note: MAG's target is 2.5 million per annum)
- Regular admission fee at $25

Performing Arts Venues

- Utilization rates at 82% - 90%
- Average ticket price at a range of $100 - $350
- Attendance rates at 67% - 72%
- Programming costs at 6% to 40% of annual operating expenditure

(d) Financial Parameters

2.5 The following financial parameters have been adopted in the financial assessment.

Parameters	**Assumptions**
Project period from design/construction to operation	50 years from 2010 to 2059 (assuming that the WKCD Authority would be set up by 2008 and complete the masterplanning of the WKCD during 2008-2009)
Real Discount Rate	4% per annum
Inflation Rate	2% per annum
Nominal Discount Rate for arriving at the NPV at Year 2006	6.1% [i.e. (1+4%)X(1+2%) – 1]
Construction Cost Escalation	0% (Real) per annum 2% inflation rate per annum
Staff Costs Escalation	0% (Real) per annum 2% inflation rate per annum
Weighted Average Cost of Capital(WACC))	12.5% to reflect the WACC of a property company bidding to build and operate a facility or "cluster" of facilities under Private Sector Involvement Scenarios 1B and 2, for calculating the financing costs
Land Premium	Land valuation as at 2006 Q4, but land sale is assumed to take place in 2010

Method of Financial Analysis

2.6 The NPV approach is adopted in appraising the project cash flows over the project period which spans over a long period of time. This method uses Discounted Cash Flow techniques to convert all cash flows (costs and revenues) of future years into their present value equivalents at year 2006 to produce a net cost in NPV terms for the WKCD project as a whole. In other words, the total NPV deficits equate to the present-day value equivalent at year 2006 of the upfront investment required to cover both the capital costs and operating deficits (operating costs minus operating revenues) of the arts and cultural and related infrastructure and communal facilities over the project period, based on the assumptions that the investment return is equal to the nominal discount rate of 6.1% used in the NPV calculation and that the timing and magnitude of the annual cash flows are realised as projected in the financial assessment. As part of the estimation process, the capital costs and operating deficits have also been estimated in constant 2006 price and money of the day prices. The NPV approach is considered the most suitable approach for assessing the financial implications of the project and comparing the results between different facilities or procurement options.

CHAPTER 3 – DEVELOPMENT APPROACHES AND PRIVATE SECTOR INVOLVEMENT

Development Approaches

3.1 Two development approaches have been adopted by the FA to explore possible private sector involvement (PSI) scenarios. The first one treats the arts and cultural facilities and transport and communal facilities as financially separate from land sales, i.e., an unpackaged development approach. The second approach seeks to package some arts and cultural facilities and infrastructure facilities with commercial and residential developments, i.e., a packaged development approach. Under these two approaches, three PSI scenarios combining a range of alternative procurement options for individual facilities were tested in the financial assessment.

PSI Scenarios under the Unpackaged Development Approach

3.2 Two PSI scenarios under the unpackaged development approach have been considered:

Scenario 1A

3.3 Under this scenario, the private sector would design and build the CACF and communal facilities to agreed price and specifications under Design and Build (DB) contracts let by the public sector or the future WKCD Authority. This is the conventional mode adopted for delivering Public Works Programme projects. The operation, maintenance and management (OMM) of the completed facilities would be undertaken by different private sector parties to specified level of performance under OMM contracts let by the public sector or the WKCD Authority, i.e. the outsourcing mode. Maintenance of engineering works, such as drains, is assumed to be undertaken by relevant Government departments.

3.4 There would be no private sector financing involved and no use of land to directly subsidise development and operation of the CACF and infrastructure facilities under this scenario. This is the scenario where the cost of developing and operating the CACF would be most transparent; it transfers the least risk to the private sector.

Scenario 1B

3.5 Under this scenario, the private sector would build and maintain most of the CACF to specified conditions and service level under Design-Build-Finance-Maintain (DBFM) contracts let by the public sector or the WKCD Authority. Upon completion, the private sector would operate the CACF and communal facilities under Operation and Management (OM) contracts. However, taking into account market viability, the **M+** and most of the communal facilities would only be susceptible to DB contracts as per Scenario 1A. On the other hand, the Exhibition Centre and the APM might be developed using a Build-Operate-Transfer (BOT) contract. Maintenance of engineering works is assumed to be undertaken by relevant Government departments.

3.6 Like Scenario 1A, there will be no use of land to subsidise development and operation of the facilities under this scenario. But it is comparatively more aggressive in terms of risk transfer; the public sector does not have to pay upfront for the costs of designing and constructing the designated performing arts facilities but will pay the private sector through regular payments. The private sector party would usually raise finance from external financiers to support the construction works and the total cost is thus inflated by the risk premium and cost of financing incurred by the private sector. Furthermore, under this scenario, it is assumed that the DBFM contract will cover maintenance of the building structure only, since maintenance of facility equipment (e.g., the sound system and other stage equipment) is very much linked to the operation and management of the venues. The FA has pointed out that the DBFM approach may prove difficult for performing arts venues.

PSI Scenario under a Packaged Development Approach

3.7 Under this scenario (Scenario 2), proceeds from land sales are directly used to subsidise the development and operation of some facilities. The FA has proposed doing this in three packages: the commercial (including hotels) sites would be developed with some arts and cultural facilities (the Mega Performance Venue and Medium-sized Theatre 1 and Black Box Theatres 2 & 3) in two packages (Packages A and B) while the residential land would be packaged with the OACF, transport and communal facilities under one package (Package C). There still remain a considerable number of CACF which could not be financed through these development packages and accordingly the DBFM approach is assumed. To defray the building and operation costs for the arts and cultural facilities as well as the financing costs and risk premium, the private sector is expected to offer a lower land premium for the commercial and residential sites.

3.8 As the cost of developing and operating those packaged CACF is met through a reduced land premium, the drawback of this scenario is the lack of transparency. Unlike Scenarios 1A and 1B where public expenditure has to be voted by Legislative Council (LegCo), the packaged development approach uses land premium to directly subsidise arts and cultural facilities. This might give rise to accusation of Government circumventing LegCo or transferring interest to the private sector, both were indeed major criticisms against the IFP.

The Public Sector Comparator

3.9 As a reference case, a public sector comparator (PSC) has been constructed by the FA as if the WKCD project were to be financed, owned and implemented by the public sector. A PSC is produced for comparative purposes, as part of a procurement exercise. It is expressed in NPV terms and takes into account the risks that would be encountered under that method of procurement. Importantly, the PSC is not necessarily the public sector undertaking all activities such as building construction. Rather it is the risk adjusted cost of public sector procurement practices, which, in Hong Kong, includes contracting out some services including building design, building construction, and services such as cleaning and security to the private sector.

3.10 Experience overseas indicates that a PSC cannot be calculated exactly. Insofar as the current practice in the United Kingdom and Australia where a PSC is drawn up, this is increasingly used as a reference tool only. It should be realised that the PSC is merely one of a number of assessment tools which may be used in preparing for a PPP approach to the delivery of services but not a pass/fail test.

CHAPTER 4 – FINANCIAL IMPLICATIONS

Estimated Capital Costs and Operating Deficits

4.1 The estimates of the capital costs and operating deficits by the FA are based on the following assumptions on development and operation programme-

Year(s)	Development/Operation Programme
Phase 1: 2008	Establishment of WKCD Authority
2008–2009	Completion of master layout plan by the WKCD Authority
2010	Commencement of the 50-year project period – land sale – design competition for **M+** and commencement of detailed planning, design and construction of other facilities
2015	Completion of construction of all Phase 1 CACF, OACF, transport and communal facilities and engineering works
2014 onwards	Operation of various arts and cultural facilities in stages
Phase 2: 2022–2025	Planning / design of Phase 2 performing arts facilities and construction of these facilities
2026	Operation of Phase 2 performing arts facilities commences
2028–2030	Detailed planning/design and construction of Phase 2 **M+**
2031	Operation of Phase 2 **M+** commences
2059	End of 50-year project period

4.2 The estimated capital costs include the following-

(a) capital costs of the CACF recommended by the PATAG and MAG and OACF, transport and communal facilities and engineering works; and

(b) operating costs of the future WKCD Authority from 2008 till 2015 when the Phase 1 CACF are completed, including the masterplanning costs during the period 2008-2009. For financial assessment purpose, these operational costs are capitalised and treated as capital costs so as to distinguish them from the operating deficits during the operation period of the WKCD.

4.3 The operating deficits include the following-

(a) operating deficits of the CACF, OACF, transport and communal facilities, and engineering works; and

(b) operating costs of the WKCD Authority (mainly in area management).

4.4 The capital costs and operating deficits expressed in NPV at year 2006 for the three PSI scenarios and the PSC are summarised below. More detailed figures are given in **Annex 5**.

Summary of Capital Costs and Operating Deficits (NPV in $billion)

Costs/Deficits	**PSI 1A**	**PSI 1B**	**PSI 2**	**PSC**	Formula
Capital costs	(21.6)	(22.0)	(16.3)	(21.7)	(a)
Operating deficits	(8.4)	(8.4)	(8.6)	(11.1)	(b)
Finance cost	-	(1.3)	(0.8)	-	(c)
Total deficits	(30.0)	(31.7)	(25.7)	(32.8)	(d) =(a)+(b)+(c)

( ) = Negative NPV

Note : - The base design and construction costs are the same under all PSI scenarios. The capital cost is slightly higher in PSI 1B because of a higher risk premium. Part of the capital cost for PSI 2 (packaged development) is reflected in a reduced land premium. The slightly higher operating deficits under PSI 2 is mainly due to the operating surpluses forgone resulting from packaging of the two revenue-generating facilities (i.e. the MPV and car park) with commercial developments.

Estimated Land Premium

4.5 The land premium of the commercial and residential sites in the WKCD is estimated by the FA at $20.9 billion [Note 4] in NPV at year 2006. The estimation takes into account the plot ratio restriction of 1.81, the maximum residential GFA permitted, and the GFA available for commercial developments after allowing for the provision for the CACF recommended by the PATAG and the MAG, OACF, and communal facilities. It is based on generally acceptable methodology and the general market situation as at end 2006. The estimated land premium is significantly lower than the capital costs and operating deficits, as shown below.

Comparing land premium with capital costs and operating deficits (NPV in $billion)

Costs/Revenue	PSI 1A	PSI 1B	PSI 2	PSC
Total Capital Costs and Operating Deficits	(30.0)	(31.7)	(25.7)	(32.8)
Estimated Land Premium	20.9	20.9	14.2	20.9
Difference (Funding Gap)	**(9.1)**	**(10.8)**	**(11.5)**	**(11.9)**

( ) = Negative NPV

[Note 4] For the purpose of financial assessment, it is assumed that all the residential and commercial sites will be sold in 2010. In practice, the timing of the sale of these sites will be decided by the Government having regard to the prevalent housing and lands policy as well as the market conditions.

Key Findings

4.6 The FMAG notes the following key findings of the FA's financial analysis:

(a) None of the proposed arts and cultural facilities is financially self-sustainable (taking both capital costs and operating costs into account), which is in line with relevant international experience that arts and cultural facilities are typically loss-making and require significant public subsidies in both capital and operating costs.

(b) Only two venues might ***operate*** with a surplus - the Exhibition Centre and the Mega Performance Venue.

(c) There would be a significant funding gap if we were to take on board all the recommendations on the CACF made by PATAG and MAG, and adhere to the initial development mix, in the sense that the estimated land revenue from selling the commercial (including hotels) and residential sites in WKCD would not be able to cover even the capital costs, let alone the operating deficits.

(d) As indicated by the FA's market sentiment testing exercise, there is very limited market interest in participating in life-cycle PPP arrangements owing to expected construction and operating risks and deficits. Moreover, there is a lack of competent market players. Instead, private sector involvement in operations, with operating subsidies, would have more potential to attract private sector interest. As a result, most procurement should take the form of traditional Design and Build contracts, and separate operation and management contracts.

4.7 Taking into account the above findings, FMAG agrees to the FA's conclusion that there is very limited scope for the WKCD project to adopt PSI scenarios adopting a life-cycle PPP approach requiring the private sector to finance the development and maintenance of the facilities and to operate the facilities over a long period of time, and for cross-subsidy between venues. As such, PSI 1A is the preferred scenario for involving the private sector in developing and operating the arts and cultural facilities of the WKCD.

4.8 A copy of the FA's Final Report containing details of the above findings is at **Annex 6**.

CHAPTER 5 – FINANCING OPTIONS

Possible Sources of Funding

5.1 The FMAG notes that the Government at present keeps an open mind on the development and funding approaches for taking forward the WKCD project. Taking into account the FA's advice that there would be little scope for attracting private sector financing in developing and operating the CACF, the FMAG has identified the following possible sources of funds and funding arrangements-

(a) Some of the land in the WKCD site would be sold for commercial and residential developments subject to the prevalent development parameters. The proceeds of the sale of the land could be a source of revenue to finance the development and operation of the arts and cultural facilities of the WKCD;

(b) Endowment fund (seed capital) from the Government to finance the development and operation of the arts and cultural facilities;

(c) Annual subvention from the Government to cover the recurrent deficit of the operation of the arts and cultural facilities;

(d) Profit sharing partnership arrangements with the private sector on the operation of certain arts and cultural facilities that have a potential to generate profits;

(e) Profit sharing arrangements with the private sector in the development and/or operation of commercial developments;

(f) Direct property development in which the Government or the future WKCD Authority would develop, hold and lease commercial developments to generate profits.

The WKCD may be funded by a mix of the above funding sources and arrangements.

Guiding Principles

5.2 The FMAG subscribes to the following key guiding principles in recommending the most suitable financing option for the WKCD –

(a) *The financing approach should provide funding stability conducive to arts and cultural development*, i.e. we should not allow the WKCD to be subject to the vagaries of market, cyclical economic changes, etc. Too much dependence on land premium would run against this objective given the significant fluctuations in land prices, as evidenced in the trend of property price indices in the past ten years with the peak prices about 3 to 4 times the trough prices;

(b) *The financing approach should preserve maximum flexibility* for Hong Kong to create a cultural hub of international status to meet not only existing shortfall in facilities and further supply-induced demand, but also to cater to further demand built up through arts education, audience development, inbound cultural tourism, etc. This consideration would mean that we should allow some "land bank" within WKCD's footprint for cultural development instead of selling off every piece of land to maximise revenue for the WKCD;

(c) *The financing approach should ensure early delivery of the project* for the long-term cultural development of Hong Kong, for facilitating the development of creative industries and for job creation, etc. We are paying a significant opportunity cost by leaving the land idle. Any PSI using land sales to directly subsidise cultural development would not meet the current expectation for LegCo scrutiny and funding transparency. Separating land sale from cultural development, i.e., adopting the conventional route, would be far less contentious and help secure community consensus for an early start. It also has the merits of both financial transparency as to the real costs and fiscal prudence as to the vagaries of the market;

(d) *The financing approach should be affordable to the Government and ensure the CACF are financially sustainable*. The WKCD Authority should have available to it such sources of revenue as to be able to underpin the operation of the CACF without direct recourse to Government. The utilisation of these revenues, given the likely revenue shortfalls of most of the CACF, would need to be subject to appropriate checks and balances and to be accounted for in such manner as to minimize the risk of moral hazard necessarily inherent in any such arrangement. In other words, it should not require Government to "bail out" the WKCD with significant funds at a later stage. The WKCD Authority should be allowed to operate the facilities (including revenue generating facilities) independently to generate recurrent income to fund the operating deficits, so as to minimise the long term financial burden of the Government. The financing option would need to be designed in such a way to impose the needed discipline.

Assessment of Different Financing Options

5.3 Taking into consideration the above guiding principles and the FA's analysis, FMAG has identified and assessed several financing options as follows.

Option 1 **: Upfront *Government endowment***

5.4 This option requires an upfront Government endowment to the WKCD Authority to cover both the capital costs and operating deficits of the CACF, transport and communal facilities, engineering works, masterplanning and area and project management in both Phase 1 and Phase 2. No land revenue from the WKCD site would be used as an endowment.

Assessment

5.5 This option would provide the needed funding certainty for developing WKCD holistically but the lack of an ongoing revenue stream might put the operation of the CACF at risk if any of the projection assumptions turns out to be invalid over the long project period. This form of subvention while well suited to meeting the initial capital costs of the WKCD relies heavily on the validity of the long term projections for assessing the quantum of the endowment required to cover future operating deficits. Also, since the upfront funding commitment is huge, it may be difficult to convince the public and the LegCo that such a substantial amount of public money should be endowed with the WKCD Authority. There may also be criticisms that the Government is subsidizing the long term operating deficits of these facilities upfront.

***Option 2* : Upfront Government endowment and vesting of commercial sites for RDE facilities with WKCD Authority**

5.6 This option would require an upfront Government endowment to the WKCD Authority to cover the capital costs of the CACF, OACF, transport and communal facilities, engineering works, masterplanning and area and project management in both phases as well as the capital costs for the RDE facilities. No land revenue from the WKCD site would be hypothecated to develop and operate CACF but Government would vest the commercial sites for RDE facilities with the WKCD Authority which would develop and rent them to generate ongoing income to cover the operating deficits. The total rental income stream from the RDE over the project period estimated by the FA is greater than the estimated operating deficits of the WKCD. However, it should be noted that both the rental income and operating deficits may fluctuate over the project period. As to the impact on land revenue, the Government has to forgo the land premium of the RDE sites (estimated at $3.9 billion).

Assessment

5.7 This option addresses the capital funding requirements of the project in a realistic and transparent manner. Capital costs are funded from the outset and the land premium from the land identified for disposal rests with the Government. Moreover, by looking to fund the shortfall in the operating revenues of the CACF and related facilities out of revenues derived from the leasing of RDE facilities, a linkage is established between the commercial, cultural and community aspects of WKCD which, if properly managed, should prove to be mutually reinforcing which is in line with the spirit of developing an integrated cultural district and coincides with PATAG's recommendation. Properly constructed, this option should also provide the needed financial discipline for the WKCD Authority to observe. This option would therefore provide a more sustainable CACF operation and reduce possible reliance of the future WKCD Authority on Government for funding the long term deficits of the CACF, which is in line with the sound and prudent fiscal principles of affordability and sustainability.

5.8 The downside is that the WKCD Authority would have to bear the risk of developing and renting commercial premises and expose the CACF to the risk of fluctuating rental income from the commercial premises inherent in a market economy. It does, however, have the merit of ensuring that there is every incentive for the WKCD Authority to strive to maintain the relevance and attractiveness of the WKCD to a broad based constituency on an ongoing basis.

<u>Option 3</u> : Public Works Programme and annual subvention

5.9 This option requires the Government to finance the construction of the CACF, OACF, transport and communal facilities and engineering works in both Phases 1 and 2 under the Public Works Programme, and provide seed money to fund the masterplanning and area and project management in the development stage. The Government would also be required to provide annual subvention to the WKCD Authority to cover the operating deficits. No land revenue would be used to fund the development.

<u>Assessment</u>

5.10 The cost of this option to the Government would be similar to that of giving an endowment to the WKCD Authority to develop the facilities. It should however be better to leave the development work to the WKCD Authority which can provide a platform to enable greater participation by the arts and cultural and professional sectors. Furthermore, the need to seek LegCo approval of appropriation of funds on a project basis and annually for the WKCD Authority's expenses might not be an efficient use of LegCo's or WKCD Authority's time and resources or conducive to providing a stable environment for arts and cultural development, as the approval of funding could be influenced by prevailing public opinions, political environment and competing priorities.

<u>Option 4</u> : Upfront Government endowment and part of land premium

5.11 This option requires an upfront Government endowment to the WKCD Authority to cover capital costs of CACF, OACF, transport and communal facilities, engineering works, masterplanning and area and project management in both phases. In addition, the Government would use part of the land premium to cover the total operating deficits over the project period. This would require either vesting part of the land with the WKCD Authority or setting up a dedicated trust to hold the land revenue.

<u>Assessment</u>

5.12 This option is subject to the inherent weakness of fluctuating land prices, though to a lesser degree, due to the smaller amount of land premium required. The difference in upfront cost to Government is modest. Hypothecating the land revenue to subsidise arts and cultural facilities may not be acceptable to the public and LegCo.

<u>Option 5</u> : Land premium and upfront Government endowment

5.13 This option requires the Government to use the whole land premium to fund the capital costs and operating deficits in both Phases 1 and 2 either through vesting all the land with the WKCD Authority or setting up a dedicated trust to hold the land revenue. The funding gap is to be met by an upfront Government endowment to the WKCD Authority.

<u>Assessment</u>

5.14 Like Option 4, this option is also subject to the inherent weakness of fluctuating land prices, and the extent of reliance on land premium is much greater. Hypothecating the land revenue to directly subsidise arts and cultural facilities may not be acceptable to the public and LegCo.

Recommended Financing Option

5.15 Taking account of the above guiding principles and the views expressed in the early stages of the WKCD development, including those included in the LegCo Subcommittee on WKCD Development's reports, as well as the preference indicated by the Consultative Committee in its advice to the FMAG (see Chapter 6), the FMAG considers that Option 2 (Upfront Government endowment and vesting of commercial sites for RDE facilities with WKCD Authority) should be the most suitable option to finance the WKCD project. According to the FA's estimates, the total net rental income of the RDE over the project period should be more than sufficient to cover the operating deficits of the arts and cultural facilities, transport and communal facilities, engineering works, and the operation costs of the WKCD Authority. Adopting this option would render the operation of the WKCD financially sustainable. The funding requirement would therefore be confined to financing the capital costs only.

CHAPTER 6 – RECOMMENDED MEASURES TO BRIDGE THE FUNDING GAP

6.1 In view of the significant funding requirements estimated for the WKCD project which far exceed the revenue that could be brought about by the land resources in the WKCD, the FMAG has considered different ways to reduce the funding requirement and the gap between the estimated land revenue and total deficits. There are basically only two broad options to achieve this – (a) increasing the land revenue generated within the WKCD by relaxing the constraints such as the 1.81 plot ratio and the 20% cap on residential GFA **or** (b) reducing the CACF footprint so as to release more GFA for land sale while lowering the development and operating costs of the CACF. The FMAG considered that the former option went beyond financial consideration as this option should be considered from a wider social, political and planning context. Having considered a number of measures, the FMAG sought a steer from the Consultative Committee on 26 March 2007, based on the preliminary estimates produced by the FA.

Guidance of the Consultative Committee

6.2 The Consultative Committee advised that-

(a) The development parameters set out in the October 2005 Package should remain unchanged. Whilst raising the 1.81 plot ratio and/or 20% cap on residential GFA to produce more revenue would have a very positive effect on reducing the funding gap, such measures would be very controversial, likely to face major social, political and planning obstacles that are difficult to overcome, and hence cannot meet the policy objective of making an early start on WKCD;

(b) Self-sufficiency and living within the means, i.e. funding for WKCD, both capital and recurrent, should be met entirely from the revenue generated from the 40-hectare WKCD site;

(c) Financial sustainability on a long term basis, i.e. operation of the arts and cultural facilities in WKCD should not be dependent on recurrent Government subsidy or become a burden on public finance;

(d) Organic growth. i.e. WKCD should have adequate capacity to grow by reserving adequate land for future development;

(e) Phased development should be pursued as a more realistic approach; and

(f) The FMAG should touch base with the two Advisory Groups to find ways to reduce the funding requirements.

The Consultative Committee also agreed to the principles for funding the WKCD as set out in Chapter 5.

6.3 In the light of the Consultative Committee's advice, the FMAG has instructed the FA to conduct sensitivity tests on a number of variations to the parameters. Taking into account the results of the sensitivity tests, the FMAG has come up with the following possible measures to bridge the funding gap.

Possible Measures to Bridge the Funding Gap

6.4 The possible measures proposed by the FMAG aim at reducing the capital costs and operating deficits on the one hand, and increasing the revenue that may be generated from the land resources on the other. In view of the longer term potential of West Kowloon for developing prime office facilities outside the Central Business District to support the growth of Hong Kong as an international finance and commercial centre, and taking into account the Consultative Committee's steer, the FMAG considered that any GFA released from the proposed measures should be allocated for office development.

6.5 The proposed measures include-

(a) reducing the scale of the CACF while the timeframe for the architectural design of the **M+** and iconic performing arts facilities should be aligned;

(b) allocating the GFA so released for office development;

(c) reducing the GFA for hotel and retail/dining/entertainment (RDE) facilities and allocating the GFA so released for office development; but there should be flexibility as to whether the 28,000 sq. m. hotel GFA released (i.e. one-third of the total hotel GFA) should be allocated for office development, so that the appropriate hotel/office mix could be decided by market forces when the land is sold; and

(d) WKCD Authority to be responsible for the open space, APM and car parks; the remaining transport and communal facilities and engineering works supporting the entire WKCD project area to be undertaken by the Government through separate funding under the Public Works Programme.

6.6 These measures are analysed below.

(a) <u>Reducing the Scale of the CACF; Released GFA for Office Development</u>

*(i) <u>reduce the area of the **M+**, fine tune the split of its Phase 1 and Phase 2 area and use a lower NOFA/GFA ratio ; released GFA for office development</u>*

6.7 The MAG recommends that the Net Operating Floor Area (NOFA) of the **M+** should be 75,000 sq. m. (including storage and conservation laboratory which may be located outside the WKCD), which is on a par with the requirement under the IFP for <u>four</u> museums with different themes. The MAG also recommends that the **M+** should be developed in phases with Phase 1 covering 49,000 sq. m. of NOFA and subsequent Phase(s) covering 26,000 sq. m. of NOFA. The MAG further recommends that the NOFA should be converted to GFA at a ratio of 1:1.67 resulting in a total GFA of 125,000 sq. m.

6.8 The proposed GFA for **M+** would be bigger than renowned museums of similar nature around the world (e.g., Centre Pompidou in Paris, Tate Modern in London or New York Museum of Modern Art). Having sought the views of MAG on 17 April 2007, FMAG considers that there should be scope for down-sizing the **M+** without unduly compromising its vision while enabling it to achieve its intended objectives, with room for achieving economies of scale, thereby reducing the space required. The recommended measures include-

- reducing the on-site NOFA of the **M+** by 30% (and off-site NOFA by 12.5%);
- fine tuning the phasing of the development of the scaled down **M+** in two phases at a 70%/30% ratio; all the off-site area (storage and conservation laboratory) will be developed in Phase 1; and
- reducing the NOFA/GFA ratio to 1:1.5

6.9 With the above measures, the total resultant GFA of the **M+** would become 78,750 sq. m., comprising 61,950 sq. m. on-site area and 16,800 sq. m. off-site area. This on-site GFA is split into 43,365 sq. m. for Phase 1 and 18,585 sq. m. for Phase 2 according to the 70%/30% ratio. The MAG has deliberated these revised GFA. Noting that the revised GFA is still comparable to renowned museums overseas such as the Museum of Modern Art in New York and the Tate Modern in London, the MAG did not consider that the vision and objectives of **M+** would be significantly affected by this reduced scale and phasing arrangement. The MAG however considered that the size of the **M+** should only be limited in terms of GFA without any specified NOFA in order to give maximum flexibility to the architectural design of the building.

(ii) *<u>Use a lower NOFA/GFA Ratio for the performing arts facilities; released GFA for office development</u>*

6.10 The PATAG's recommendations on the performing arts facilities are expressed in terms of seating capacity only. In estimating the capital costs and operating deficits for these recommended facilities, the FA has adopted a NOFA/GFA ratio of 1:1.5, taking into account the space requirements for these facilities to be built to world class standards and with iconic designs in certain facilities.

6.11 As part of the sensitivity tests, the FA has estimated the costs and deficits of the CACF using lower NOFA/GFA ratios including the 1:1.25 ratio adopted in the IFP. While the FA has cautioned that reducing the ratio to 1:1.25 may not be entirely practicable due to the specific requirements of the arts and cultural facilities and that some of them should have iconic designs, the FA considered that a modest adjustment of the ratio to 1:1.4 for the performing arts facilities would be a viable option.

6.12 The PATAG noted the NOFA/GFA ratio of 1:1.4 for the performing arts facilities and has not made any adverse comments on the ratio.

(iii) *Align the approach and timing for architectural competition for iconic facilities*

6.13 Taking into account the Consultative Committee's advice, the timeframe for the architectural design competition for the **M+** recommended by the MAG would be reduced through organizing a competition by invitation instead of an open competition; at the same time, there should also be architectural design competition (by invitation) for the iconic PA venues, i.e. the Xiqu Centre and the Concert Hall/Chamber Music Hall. This would align the development timing for both the proposed **M+** and the performing arts facilities requiring iconic architectural design. The impact on the capital costs and operating deficits would be insignificant.

(b) ***Reduce the GFA for Hotel and RDE Facilities and Allocate the Released GFA for Office Development***

6.14 The FA assumed that a total GFA of 84,000 sq. m. would be required to build three hotels in the WKCD giving a total of 1,400 rooms. FMAG considers that two-thirds of this GFA (i.e. 56,000 sq. m.) for hotel developments in the WKCD is already quite significant. A GFA of 28,000 sq. m. could therefore be released for office development.

6.15 The FA has also assumed that all the residual GFA after making provision for the CACF, OACF, communal facilities, residential and hotel developments would be allocated for RDE facilities giving quite a substantial GFA of 148,609 sq. m. The FMAG considered that there should be scope to reduce the GFA for the RDE taking into account also the recommended reduction in the scale of the CACF. Accordingly, FMAG recommends to replace 20% of the GFA for RDE (i.e., 29,609 sq. m.) by office development.

6.16 The total GFA for office development arising from all the recommended measures discussed above would amount to 107,683 sq. m at an estimated land premium of $2.4 billion. This GFA of office development is of a reasonable scale for office development. The FMAG considers this provision for Grade A offices development within the WKCD to have the long term potential of developing West Kowloon into an office node outside the Central Business District. The office developments would also provide an essential base load of weekday consumers for the RDE facilities.

6.17 Taking into account the Consultative Committee's view expressed at the meeting on 14 May 2007, the FMAG further proposed to leave some flexibility as to whether the 28,000 sq. m. hotel GFA (i.e. one-third of the total hotel GFA) should be allocated to office development, so that the appropriate hotel/office mix could be decided by market forces when the land is sold. As the appropriate mix is to be determined by the market, the FMAG did not see the need to make any adjustments to the estimated land revenue.

(c) ***WKCD Authority to be Responsible for the Open Space, APM and Car Parks; the Remaining Transport and Communal Facilities and Engineering Works to be Undertaken by the Government***

6.18 Strictly speaking, the transport and communal facilities, such as roads, drainage, fire station, public piers, etc. and engineering works which are designed to support the whole WKCD including residential, commercial and hotel developments should not be the core responsibility of the WKCD Authority. The FMAG considers that it would be more appropriate for these facilities and engineering works to be built and maintained by the Government like other public facilities and infrastructure facilities. On the other hand, the FMAG appreciates that the open space, car parks and the APM would have a direct bearing on the operation of the WKCD and should therefore be put under the WKCD Authority's responsibility. However, it is necessary to distinguish between financial obligations and development requirements and oversight. From a consumer standpoint, the WKCD Authority should still have a role to play in ensuring that the infrastructure and communal facilities, in particular the transport linkages, are properly put in place.

Estimated Funding Requirement for the WKCD

6.19 If Financing Option 2 described in Chapter 5 is adopted, the Government would have to pay for the capital costs for the reduced RDE facilities (GFA 119,000 sq. m. estimated at $2.5 billion). Taking into account this additional capital cost, the recommended measures outlined above as well as the Consultative Committee's steer given on 14 May 2007 in aligning of the timeframe for the architectural design of the **M+** and the iconic performing arts facilities, the estimated capital costs would be reduced to $19.2 billion. On the other hand, the estimated land premium would have been reduced by the RDE land revenue forgone ($3.9 billion), but it is partly compensated for by the new GFA for office development ($0.7 billion). The land premium would thus be reduced to $18.9 billion. This is comparable to the capital costs of $19.2 billion. The revised operating deficits of the WKCD (estimated at $6.7 billion) can be totally met by the revised net rental income generated from RDE facilities (estimated at $7.5 billion). Detailed calculations are shown in **Annexes 7 to 10**.

6.20 In short, if Financing Option 2 in Chapter 5 and all the recommended measures outlined in this Chapter are adopted, the development and operation of the WKCD would be financially self-sufficient and sustainable within the 40-hectare WKCD site. Accordingly, an upfront endowment of about **$19 billion** (NPV at year 2006) will be required.

Development Mix under the Recommended Measures

6.21 The development mix under the recommended measures discussed above is as follows-

Development Mix	GFA (m^2)	% of Total GFA
M+ Note 5	61,950	8%
Exhibition Centre	12,500	2%
Performing art venues	188,895	26%
Sub-total	**263,345**	**36%**
Other arts and cultural uses	15,000	2%
Communal facilities	20,000	3%
Sub-total	**35,000**	**5%**
Residential: Villa Houses & Apartments	145,257	20%
Hotel	56,000	8%
Office Note 6	107,683	15%
Retail, Dining & Entertainment	119,000	16%
Sub-total	**427,940**	**59%**
Total	**726,285**	**100%**

6.22 The FA's broad estimates indicate that there will be about 15 hectares of public open space at ground level, plus 3 hectares of piazza areas. Additionally, another 5 hectares of public open space will be provided on terraces and roof top gardens, etc, making a total of 23 hectares public open space in WKCD.

Note 5 On-site portion.

Note 6 In line with the recommendation in paragraph 6.17, this includes 28,000 sq. m. of GFA which may be used for hotel or office development depending on market forces.

CHAPTER 7 – ECONOMIC IMPACT ASSESSMENT

The Need for an Economic Impact Assessment

7.1 The WKCD is the largest single arts and cultural project Hong Kong has ever planned and a substantial investment in arts and cultural development. The project not only involves construction of a cluster of arts and cultural facilities together with supporting infrastructure and communal facilities, it also provides tremendous opportunities for the development of the arts and cultural software and the creative industries. The FMAG is of the view that in considering the financial implications of the project, it is also necessary to take into account the wider economic impact of the project for Hong Kong as a whole. The FMAG therefore requested that an economic impact assessment (EIA) on the WKCD project be conducted.

Findings of the Economic Impact Assessment

7.2 The findings of the EIA on the WKCD conducted by the Government Economist in April 2007 reveal that the project would bring substantial economic benefits to Hong Kong, both in terms of quantifiable tangible benefits and intangible benefits.

7.3 The tangible economic benefits include substantial value added contribution to the Gross Domestic Product (GDP), the employment created by both the construction of the facilities in the WKCD in the shorter term, as well as the operation and management of such facilities, and the economic activities involved in the programmes and activities in the various arts and cultural venues in the longer term. Spending by tourists (including those induced by the WKCD to visit Hong Kong and those extending their stay in Hong Kong) and local visitors also constitutes a significant source of economic value added and job creation arising from the WKCD.

7.4 The intangible economic benefits that have been identified in the EIA are as follows-

- (a) fostering the development of a creative economy;
- (b) nurturing local talents;

(c) attracting and retaining investors and talents;
(d) raising quality of life;
(e) reinforcing economic integration with the Pearl River Delta; and
(f) branding Hong Kong as a world city.

Further Action on the Economic Impact Assessment Report

7.5 The FMAG agrees with the conclusion of the EIA that the WKCD is a strategic investment for Hong Kong. The FMAG recommends that in justifying the investment of the WKCD, the Consultative Committee should also take into account its wider economic impact, in particular the intangible benefits which are unique to the WKCD project. The FMAG further recommends that the findings of the EIA should be shared with the public, in order to put the financial implications of the project in the proper perspective when engaging the public on the WKCD.

END