

Specialist Advisor to the Subcommittee on  
West Kowloon Cultural District (WKCD) Development  
for the study on The Financial Aspects of the WKCD Project  
for the Legislative Council Commission

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# 1. a financial overview

figures in NPV, 2008 prices, HK\$, millions		capital	operations	total	%
1	<b>WKCDA management</b>	(1,230)	(1,015)	(2,245)	9%
2	<b>master planning</b>	(34)	-	(34)	0.1%
3	<b>M+</b>	(4,749)	(5,917)	(10,666)	40%
4	<b>exhibition centre</b>	(535)	281	(254)	1%
5	<b>mega performance venue</b>	(2,706)	1,014	(1,692)	6%
6	<b>great theater 1</b>	(1,220)	(5)	(1,225)	5%
7	<b>great theatre 2 and medium theatre 3</b>	(986)	(318)	(1,304)	5%
8	<b>medium theatre 4</b>	(303)	(128)	(431)	2%
9	<b>concert hall &amp; chamber music hall</b>	(1,421)	(307)	(1,728)	7%
10	<b>xiqu centre</b>	(1,174)	(213)	(1,387)	5%
11	<b>medium theatre 1</b>	(515)	(159)	(674)	3%
12	<b>medium theatre 2 &amp; black box theatre 1</b>	(699)	(213)	(912)	3%
13	<b>black box theatres 2 &amp; 3</b>	(320)	(140)	(460)	2%
14	<b>black box theatre 4</b>	(195)	(104)	(299)	1%
15	<b>piazas</b>	(310)	-	(310)	1%
16	<b>other arts and cultural facilities</b>	(331)	-	(331)	1%
17	<b>transport facilities</b>	(1,049)	179	(870)	3%
18	<b>communal facilities</b>	(1,027)	(537)	(1,564)	6%
	<b>sub-total</b>	<b>(18,804)</b>	<b>(7,582)</b>	<b>(26,386)</b>	<b>100%</b>
19	<b>RDE: retail, dining &amp; entertainment</b>	(2,765)	8,448	5,683	21.5%
	<b>total</b>	<b>(21,569)</b>	<b>866</b>		
	<b>to be met by land values</b>	<b>21,288</b>			

## 2. scenarios of private sector involvements

options:	1A	1B	2
<b>M+ 's procurement &amp; operation</b>	Same for all 3 Scenarios: design competition, design & build Operate, Manage and Maintain by Not-for-Profit Organisation		
private sector's roles on performing arts (PA) facilities	design & build only do NOT finance, maintain, or operate	design & build	design & build
		finance & maintain	finance & maintain
		do NOT operate	own & operate packaged PA facilities*
<b>level of private sector involvement</b>	<b>small</b>	<b>medium</b>	<b>large</b>
<b>total cost: capital &amp; operating</b>	<b>\$29,950 Mn</b>	<b>5.8% more expensive than 1A</b>	<b>8.1% more expensive than 1A</b>
finance cost	6.1% p.a.	12.5% p.a.	12.5% p.a.
risk premiums allowed	23%	29.5% (p 34)	20.8%
operating costs (over 50 years)	\$8,333 Mn	\$8,333 Mn same as 1A?	\$8,569 Mn almost the same as 1A?
efficiency gain due to larger private involvement	-	Not allowed for	
WKCD Authority's costs	Same for all 3 Scenarios : \$2,117 Mn		

\* Package A: MPV + hotel 2,3 + RDE; B: MT1+ BBT2,3 + hotel 1 + RDE;  
C: residential, others A&C + transport, communal facilities

### 3. on “design and build”

design & build	conventional: separating design & build
Full <b>performance specification</b> needed	tender after detailed design
This specification is never exhaustive	Could be reviewed and adjusted after detailed design, and before tendering
How to specify performance in terms of comfort, space, aesthetics, quality of architectural detailing?	
Without detailed design, BD contractor may <b>cut costs</b> to meet minimum performance only	With detailed design, there can be much <b>more accurate costs</b> estimates for both contracting parties:
lacks an architect’s independent view	has architect’s <b>independent</b> view
May save time before tendering, but could be <b>problematic</b> if competition is used to choose a design	Little longer time for detailing, but will pay off in terms of <b>value for money</b>
May be more <b>costly to rectify</b> problems, such as contractual dispute that occurs at a later stage	Client knows exactly what it will get before committing resources
Suitable for, civil engineering projects, building services or buildings with functional requirements only	More suitable for artistic and innovative <b>complexes</b> , like M+ and PA facilities
<b>Appointment of an operator</b> before conceptual design is most essential in both cases	

## 4. capital, on-costs, and operating costs

<b>Capital costs</b>	NPV 2008 \$ million	as % construction cost	Compared to Conventional/ Alternative
direct construction cost	11,012	100%	unit costs are comparable
professional fees	1,869	6% to 14.6%	6%
contract management		8% to 9%	conventionally included in the developer's normal profit: either the WACC(12.5% p.a.), or 10% profit on construction (H-11)
WKCDAs costs years 1-8	1,230	11.2%	
risk allowances	2,850	25.9%	10% to 15% contingencies
major repair and renovation	2,891	26.3%	Conventionally half-replaced Not allowed for after 50 years
museum development	1,717	15.6%	franchise fee \$156 million for international operator

**Total capital cost**                      **21,569**                      **195.9%**

To be met by land value              21,288

Ref. FA page H-11 ; and WKCD-511  
Annex 2, and 5(a)

### **Operating deficits**

CACF, transport, communal	6,567
WKCDAs costs years 9-50	1,015

**Total operating deficit**              **7,582**

To be met by RDE rental              8,448

## 5. risk and sensitivity analysis: any contingency plan?

Sensitivity Tests	Assumptions		Financial impacts in billion HK\$	As % of \$21.6 billion
	ST2	Pessimistic Outcome in procurement and operations	- 5.7	-26%
ST4	50% Real Decrease in Land Premium	-10.4	-48%	
ST9	3% Real Discount Rate (instead of 4%)	- 4.1	-19%	
Tests still missing	<b>Construction costs escalation</b> (over 6% p.a. over past 30 years, much higher than FA's assumption of 2%)		most Significant especially first 5 years	to be assessed
	<b>Volatility in investment returns</b> (no risk free investment tools at 6.1%)			

## 6. management organisation

	WKCDA management costs years 1-8 development phase	WKCDA management costs years 9-50 operation phase
<b>1 Directors Staff</b>	<b>90</b> (5 departments: chief executive, planning & development, property, finance, procurement. excluding consultants)	<b>33</b> (5 departments: chief executive, area management, finance)
<b>2 Duties</b>	<b>land assembly</b> and property master planning and project development <b>strategic</b> and business planning <b>cultural and arts policy liaison</b> legal, procurement contracting and <b>finance</b>	estate management area marketing and programming <b>strategic</b> and business planning <b>cultural policy liaison</b> legal, contract management procurement and <b>finance</b>
<b>3 Annual costs (HK\$)</b>	189.4 million	60.3 million
<b>4 In 2008 NPV</b>	1.23 billion	1.015 billion
<b>5 Other supports</b>	out-source consultants	Operations of individual facilities budget separately

Relevant questions:

1. What are the detailed duties, ranks, salaries, for these 90 (or 33) staff? 5. Would their duties overlap with the out-source consultants?
2. Would it be more cost effective to out-source some of these duties?
3. What are the detailed breakdowns of \$189.4 and \$60.3 million?
4. Compared with CACF (details down to the smallest theatre are provided), is the information **too coarse to justify the funding of \$2.245 billion?**



## 7. financial sustainability

Under the current proposal of a **21.6 billion endowment** fund

Capital costs:	met by land values
Operating cost:	met by RDE rental

After 50 years, there will be **no funding provided for:**

Major repair and renovations of FFE , M&E	Renovation/reconstruction of building structures & fabric: assuming the buildings last only for 50 years
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The **additional seed fund needed** for this purpose is **\$3.38 billion \***  
(i.e. **16% of the endowment**, in PV terms, )

\*3.378 billion = 20.639 billion x (1/1.04)<sup>50</sup> + (1/1.04)<sup>100</sup>+...

20.639 billion = 21.568 – 0.873 billion (for museum collection) - 0.056 (for land cost of off site storage)  
in 2008 NPV

## 8. the question of M+ : is it like Pompidou?

Museums	M+	Solomon R. Guggenheim Museum (New York)	San Francisco Museum of Modern Art	Museum of Modern Art, New York	Metro-politan museum of Art, New York	Art Institute of Chicago	Tate Modern London	Centre Pompidou Paris
Exhibit area sq. m	26,000	4,600	4,647	11,612	78,366	19,600	7,827	22,000
GFA sq. m	61,950	n.a.	20,911	73,420	200,000	64,400	43,000	103,305
Exhibits	Design, popular culture, moving image, visual art	Modern art	Modern art	Modern & contemporary art	One of world's largest & finest art museum	Art museum and school	Modern art	Modern art & contemporary creation, including design & architecture
collection/ history/ franchise fee	Cost \$ 1,717 million to be collected in 4 years & developed	Franchise fee \$156million in the 1990s for Bilbao	Since 1935; now over 22,000 objects	Founded in 1929; now 150,000 pieces <sup>[7]</sup>	Opened in 1872; now over 2 million works	Founded in 1879; now over 25,000 pieces	Collection began in 1847; Tate Gallery founded in 1897; now 65,000 pcs	Previously National Museum of Modern Art opened in 1947; now 53,000 pcs *
Full time staff	336	95 F/T	232 approx	590 F/T 20 P/T	1,783 F/T 744 P/T	725 F/T 46 P/T	1,157 FTE	918 F/T 63 Ct
Yearly acquisition	\$20 million	\$16 million	\$11 million	\$395 million	\$774 million	\$125 million	\$264 million	\$70 million
Adult fee	\$27.5 - \$30	\$137	\$98	\$156	\$156	\$94	various	\$103
Visitors per year	1.2 – 2 million	0.9 million	0.8 million	2.7 million	Over 4.0 million	1.4 million	4.0 million	5.5 million
cost recovery	18 - 22%	66%	59%	57%	55%	50%	54%	27%

\* Long collection history achieved “through the generosity of artists such as Picasso, Braque, Matisse, Chagall and Brancusi, which had hitherto been passed over by other institutions.”

## 8. the question of M+ (cont'd): the Guggenheim model

The FA's conclusions on the Guggenheim model:

Question:

Guggenheim is not interested	Did <a href="#">Guggenheim joint venture with Pompidou</a> and HK's Dynamic Star in 2005 for <a href="#">WKCD</a> (IFP)? There was an open statement*
looking for " <i>an open purse from the government</i> "	Is this a serious claim, which should be supported by evidence and assessed financial figures?
want <a href="#">design, operational, curatorial control</a>	Should this be welcomed? The FA also pinpointed that " <i>The only direct <a href="#">local experience</a> of large-scale museum operation lies with LCSD's operation of public museums.</i> "
	Yet the largest local art museum that could provide local experts with suitable experience, namely the Hong Kong Museum of Art, is only <a href="#">16%</a> of the proposed size of M+.
	Is this the best way for <a href="#">knowledge transfer</a> ? After all M+ is a \$10.7 billion investment.
a <a href="#">pricey</a> model	<a href="#">Inconsistent with FA's data</a> : this model could save up to \$4.8 billion, according to FA's data provided so far. This is financially so significant that it should have been studied and compared very seriously than the way it is treated now.

\* Statement still available on the web: [http://www.guggenheim.org/press\\_releases/release\\_140.html](http://www.guggenheim.org/press_releases/release_140.html)

## 9. on RDE: retail, dining and entertainment

119,000 sq.m gfa:( 2012 construction)	a considerable size: bigger than Elements, potentially a rival if not planned very differently
Valued at monthly rental of \$30 psf:	Comparables are large malls: not scattered
scattered shops: how to ensure sufficient pedestrian flow in order to sustain \$30 psf?	full integration of cultural venues and shops: a lengthy evolution process. London Theatre Land has more than 200 years history
Physical plan unknown: complements or conflict to arts facilities	RDE: CACF ratio = 2:5 A rather large ratio to be planned into CACF
not all developers are successful in RDE/malls. most successful ones own substantial shares of their malls	successful malls/RDE depends on: expertise in planning, design, tenant mix, tenants' relative locations, pedestrian flow, leasing, theme, promotion, management
Experience shows that public owners are likely to be less successful:	the level of private participation in WKCD's RDE should be carefully considered
the current proposal might have implied 100% WKCDA ownership? (otherwise, there is insufficient RDE rental to cover operating loss)	
Comparing to operating details of CACF, those for RDE are clearly insufficient	
Needs a good business plan for this life line	

# 10. Key parameters to be monitored

The publication of these information are essential:

The early appointment of <b>operators</b>	A <b>time line</b> for inviting proposals from and appointment of operators
Investment <b>return</b>	Investment <b>portfolio and performance</b>
Design <b>quality</b>	Rules of design <b>competition</b> (open or by invitation) IPF for professional services, <b>design brief</b> , selection criteria Winning designs
Quality <b>specifications</b>	Specifications for <b>quality of materials and workmanship</b>
Information on <b>expenditures</b>	<b>Unit construction costs</b> (CFA and GFA)
	<b>Professional fees</b>
	<b>Project and contract management costs</b>
	Status of <b>contingencies</b> and risk allowances
	<b>Major repair</b> and renovation costs
Management <b>organisation</b>	Staff numbers, respective ranks, <b>performance</b> pledged and achieved
<b>Utilization rates</b>	Number and types of visitors
Cost <b>effectiveness</b>	<b>Cost recovery rates</b> for individual facilities

# 11. funding priorities

Cost item		Factors to consider		
		Uncertainty	Improvement Potential	Financial Significance
1	<b>WKCD Management</b>	<b>Medium</b> Role & responsibility not clear	<b>Medium</b> in efficiency	<b>Medium</b>
2a	<b>M+ (capital cost)</b>	<b>High</b> Cost, quality & outcome highly uncertain with Design and Build	<b>High</b> in procurement (Except for costs of design competition and consultant fees)	<b>High</b>
2b	<b>M+ (operating cost)</b>	<b>High</b> Limited options available	<b>High</b> in operation mode	<b>High</b> Major cost centre
3	<b>Exhibition centre</b>	<b>Medium*</b> * Low if procured traditionally	<b>Low</b>	<b>Low</b>
4	<b>Mega performance venue</b>	<b>Medium*</b>	<b>Low</b>	<b>Medium</b>
5	<b>Great theater 1</b>	<b>Medium*</b>	<b>Low</b>	<b>Medium</b>
6	<b>Great theatre 2 and medium theatre 3</b>	<b>Medium*</b>	<b>Medium #</b> # late in program	<b>Medium</b>
7	<b>Medium theatre 4</b>	<b>Medium*</b>	<b>Medium #</b>	<b>Low</b>
8	<b>Concert hall &amp; chamber music hall</b>	<b>Medium*</b> * Low if procured traditionally	<b>Low</b>	<b>Medium</b>

## 11. funding priorities (cont'd)

Cost item		Factors to consider		
		Uncertainty	Improvement Potential	Financial Significance
9	Xiqu centre	Medium*	Low	Medium
10	Medium theatre 1	Medium*	Low	Low
11	Medium theatre 2 & black box theatre 1	Medium*	Low	Low
12	Black box theatres 2 & 3	Medium*	Low	Low
13	Black box theatre 4	Medium*	Low	Low
14	Piazzas	Medium*	Low	Low
15	Other arts and cultural facilities	Medium*	Low	Low
16	transport facilities	Low	Low	Low
17	communal facilities	Low	Medium	Medium
18	Retail, dinning & entertainment	<p><b>High</b></p> <p>Limited study on demand, business concepts, and their integration with other facilities</p>	<p><b>High</b></p> <p>Can consider other modes of operation such as private sector participation</p>	<p><b>High</b></p> <p>Life line for financial sustainability</p>

## 12. executive summary

1. This report assumes the principle that the WKCD should be **financially self sufficient** and financially sustainable within the 40 hectares of land.
2. The **Method** of comparing Scenarios of private sector involvement is **questionable**. Scenarios 1B and 2 are **not sufficiently realistic** to allow meaningful comparisons. Despite greater private sector participation in, no additional **efficiency gain** has been allowed for.
3. "**Design and Build**" is not a suitable procurement method for M+ and possibly not the best option for other core arts and cultural facilities as well.
4. Unit construction costs are within a reasonable range. **On-costs** are, however, **higher than conventional**.
5. The Financial Advisor's (FA) sensitivity analyses have not covered the financial implications of **risks in investment returns** and in **construction cost escalation**. There are also **no contingency plans** for the worse cases scenario.



## 12. executive summary (cont'd)

6. There is no fund set aside for major renovations or re-constructions **after 50 years**, beyond which the WKCD **may not be financially sustainable**. An extra saving of \$3.38 billion on capital and operating costs, equivalent to 16% of the \$21.6 billion seed fund, is needed.
7. Under the FA's operating assumptions, **M+ would cost \$10.7 billion** to construct and operate for 50 years. By 2059, M+ would account for 89% of the WKCD's yearly deficit. **M+ might become a long term financial burden** of the WKCD.
8. According to the information provided by the FA so far, should M+ be run by an international operator, the **potential saving of \$4.8 billion**, in very crude terms, could be as high as 22% of the \$21.6 billion seed fund.
9. RDE is the life line of the WKCD. Yet compared to the financial and operating details for Core Arts and Cultural Facilities (CACF), those **information provided for RDE are clearly insufficient**.
10. To build up the financial strength of the WKCD, one has to **cut spending and earn more**. it's worthwhile to consider options for (a) reduction of **on-costs**; (b) a more efficient **operation mode of M+**; and (c) an effective **business plan for RDE** facilities, are essential.