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THE PUBLIC SECTOR’S PERSPECTIVE ON PROCURING PUBLIC WORKS PROJECTS – COMPARING THE VIEWS OF PRACTITIONERS IN HONG KONG AND AUSTRALIA

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Abstract
Hong Kong has been one of the early jurisdictions to adopt Public Private Partnership (PPP) model for delivering large public infrastructure projects. The development of this procurement approach in Hong Kong has followed an intricate path. As such, it is believed that there are a number of areas which are interesting to unveil. As part of a comprehensive research study looking at implementing PPPs, interviews with experienced local industrial practitioners from the public sector were conducted to realize their perspective on the topic of procuring public works projects. Amongst these interviews, fourteen were launched government officials and advisers. The interview findings show that the majority of the Hong Kong and Australian interviewees had previously conducted some kind of research in the field of PPP. Both groups of interviewees agreed that “PPPs gain private sector’s added efficiency/expertise/management skills” when compared to projects procured traditionally. Also, both groups of interviewees felt that projects best suited to use PPP are those that have an “Economic business case”. The interviewees believed that “Contractor’s performance” could be used as key performance indicators for PPP projects. A large number of critical success factors were identified by the interviewees for PPP projects; two of these were similar for both groups of interviewees. These included “Project objectives well defined” and “Partnership spirit/commitment/trust”. Finally it was found that in-house guidance materials were more common in the organizations of the Australian interviewees compared to the Hong Kong ones. This paper studies the views of the public sector towards the topic of PPPs in Hong Kong and Australia, which helps to answer some of the queries that both academics and the private sector in these jurisdictions are keen to know. As a result the private sector can be more prepared when negotiating with the public sector and realise their needs better, academics on the other hand are provided a wider perspective of this topic benefiting the research industry at large.

Keywords: Public Private Partnerships (PPP), Procurement, Public Sector Interviews, Hong Kong, Australia.

1. Introduction

Public Private Partnership (PPP) is a procurement approach where the public and private sector join forces to deliver a public service or facility. In this arrangement normally both the public and private sector will contribute their expertise and resources to the project and share the risks involved. The definition of PPP may differ slightly between different jurisdictions, depending on which part of the arrangement the importance is focused on. But in general PPPs can be any agreement where the public and private sectors work together to deliver a public project. PPP is a relatively modern term for this arrangement used only more commonly in the last decade. Previously different variations of the arrangement included Private Finance Initiative (PFI), which is a more familiar term to many people due to its popular development in the United Kingdom (U.K.) during the early nineties (Tieman, 2003). It would not be incorrect to say that the PFI practice developed in the U.K. raised the world’s attention to this alternative option for delivering public infrastructure and services. The extent to which PFI could be used and the advantages created were the main drivers attracting other countries to start adopting or improve their practice in PPP. A more specific term used more commonly a decade ago is Build Operate and Transfer (BOT). This arrangement was commonly adopted for transportation projects. This is because transportation projects tend to be larger in size and also because their long physical lives fit well into the procurement mode. Earlier this century, concession was a common form of PPP. These early concessions mainly occurred in Europe (particularly in France) for water projects (Grimsey and Lewis, 2004). Although water projects tend not to be particularly large in project sum, it was noticed early on the advantages of introducing private expertise to deal with tasks that the public sector was probably not as efficient or experienced in carrying out the works. Despite a long history of PPPs implementation, many jurisdictions are still unclear of how to maximize the benefits to suit their culture, environment, background, geography etc. This paper therefore sets out to address the following important issues:

a. Identify the benefits, difficulties and critical success factors of PPP.
b. Measure the effectiveness of PPP against other procurement methods.
c. Identify representative case studies from countries such as Australia for analysis to identify their approach to success/failure.
Identify previous projects in Hong Kong that utilized a similar approach to PPP and to analyze their implementation successfulness.

Investigate the best conditions in terms of project nature, project complexity, project types and project scales under which the use of PPP is the most appropriate.

Evaluate the findings collected to determine a best practice framework for implementing PPP in Hong Kong.

2. Literature Review

2.1 What is the traditional practice of procuring public works project?

PPP projects are often compared with projects that are not procured by the PPP model i.e. traditional projects. But what exactly are traditional projects and how are they procured? Traditional projects unlike PPP projects do not involve the private sector in sharing the project risks. In traditional projects the public sector will undertake most risks. In a PPP arrangement the private sector will have to take up a certain proportion of the risks, often related to their duties i.e. construction, design, maintenance and operation. Whereas the public sector will take up some of the risks that are more difficult to control by the private sector alone such as environment and government approval risks. Another major difference, but not always, depending on the financial package of the project is that traditional projects are financed fully by the public sector whereas in a PPP project it is likely that the private consortium will have some equity in the asset being delivered. Again in a traditional arrangement the public sector undertakes the financial risk as well. For example in a toll road the public sector would need to undertake the revenue risk in a traditional project, whereas in a PPP project this risk would be undertaken most likely by the private sector. Therefore in general the main difference between a project procured traditionally and by PPP is the risk sharing matrix. Table 1 shows a general risk sharing matrix for the public and private sectors in PPP projects (Grimsey and Lewis, 2004). Many other studies have also been carried out in this area (Li et al., 2005; Sun et al., 2008; Thomas et al., 2003; Wibowo and Kochendörfer, 2005; Thomas et al., 2006; Ng and Loosemore, 2007; Lam et al., 2007).

| Type of risk        | Source of risk                                                                 | Risk taken by                          |
|---------------------|-------------------------------------------------------------------------------|---------------------------------------|
| Site risks          |                                                                                |                                       |
| Site conditions     | Ground conditions, supporting structures                                      | Construction contractor                |
| Site preparation    | Site redemption, tenure, pollution/discharge, obtaining permits, community liaison | Operating company/project company     |
|                     | Pre-existing liability                                                        | Government                            |
| Land use            | Native title, cultural heritage                                                | Government                            |
| Technical risks     | Fault in tender specifications                                                 | Government                            |
| Construction risks  | Contractor design fault                                                        | Design contractor                     |
| Cost overrun        | Inefficient work practices and wastage of materials                            | Construction contractor                |
|                     | Changes in law, delays in approval, etc.                                       | Project company/investors             |
| Delay in completion | Lack of coordination of contractors, Failure to obtain standard planning approvals | Construction contractor               |
|                     | Insured force majeure events                                                   | Insurer                               |
| Failure to meet performance criteria | Quality shortfall/defects in construction/commissioning tests failure | Construction contractor/project company |
| Operating risks     |                                                                                |                                       |
| Operating cost overrun | Project company request or change in                                          | Project company/investors             |
| Practice | Operator |
|----------|----------|
| Industrial relations, repairs | Operator |
| Occupational health and safety, maintenance, other costs | Operator |
| Government change to output specifications | Government |

| Delays or interruption in operation | Operator |
|-----------------------------------|----------|
| Operator fault | Operator |
| Government delays in granting or renewing approvals providing contracted inputs | Government |

| Shortfall in service quality | Operator |
|-------------------------------|----------|
| Operator fault | Operator |
| Project company fault | Project company/investors |

Table 1 A general risk sharing matrix for the public and private sectors in PPP projects (Grimsey and Lewis, 2004)

**2.2 PPP experience in Hong Kong**

Hong Kong is not completely new to the idea of PPP. In actual fact the city was probably one of the first to utilize resources from the private sector. The term PPP may sound revolutionary to Hong Kong, whereas a more familiar term is Build Operate Transfer (BOT). The concept of BOT has been used since the late sixties. In September 1969 the construction for the first BOT project in Hong Kong commenced (Mak and Mo, 2005). The Cross Harbour Tunnel (CHT) is a two lane tunnel in each direction. It took only 36 months to complete and was eleven months ahead of schedule. The CHT was an instant success when it came into operation in August 1972. Within three and a half years of operation the Tunnel had collected enough tolls to pay back its construction cost. The Tunnel is probably the most successful BOT project in Hong Kong, and is still one of the most important and profitable pieces of infrastructure locally (Asian Development Bank, 2000).
Although Hong Kong has had experience in adopting quite a number of BOT projects, the approach of PPP has never really been studied extensively in the local context. The traditional practice of these projects was for the government to directly award a concession to the potential bidder. This practice of awarding concessions is common in Hong Kong, but the gestation period spent in formulating the enabling legislation is lengthy (Zhang 2001).

In recent years the Efficiency Unit of the Hong Kong Special Administrative Region (HKSAR) Government has been heavily involved in PPP research. The Government’s interest in utilizing PPP is obvious. The approaches that they have taken mainly involve gaining international experience from particularly Europe and Australia. One of the early documents produced by the Efficiency Unit on private sector involvement was a guideline to help governmental bureaus and departments to familiarize with private sector engagement (Efficiency Unit, 2001). These guidelines were published in 2001 and showed the government’s interest in adopting the idea of PPP. Only two years later they also produced a comprehensive introductory guide to PPP (Efficiency Unit, 2003). This guide was aimed for the use of the civil service but is also made available for the public’s interest to understand the government’s approach. After the publication of this report much interest was drawn from the public due to the possibility of the increased business opportunities available. More recently, the Efficiency Unit published two more guidelines on PPP (Efficiency Unit, 2007; 2008a). The first of these publications shows how more knowledge on the issues of PPP have been learnt, it also identifies areas of concern to local practitioners as well as civil servants, and it tries to provide some insights into these areas. The second publication is much more specific on how to establish a PPP project. The guideline is aimed at coaching civil servants on how to conduct a PPP project by looking at the business case, dealing with the private sector, managing the risks, funding and payment issues, managing performance etc.

2.3 PPP experience in Australia

The practice for delivering public works projects across Australia is quite different depending on the state. Each state government will have its own set of guidelines and rules to go by. Political decisions are crucial in deciding procurement processes. PPP has been an increasingly popular choice for delivering public works projects in Australia. Although for decades there have been known to be public works projects delivered in Australia by similar partnership arrangements, it has only been since the early nineties that PPP was first properly introduced in Australia. PPP has been a growing alternative to procuring public projects across the world. Especially with the success seen from the Victoria state, the other Australian states are eager to get a taste (Ernst and Young 2006).

The Victoria government released the Partnerships Victoria policy in June 2000 providing a framework for developing contractual partnerships between the public and the private sector for public infrastructure and services (Partnerships Victoria, 2000). This bought about the change to the traditional practice of using Build Own Operate (BOO) and Build Own Operate Transfer (BOOT). The traditional practice focused more on bringing in the private sector’s financial input and also having the risk transferred from the public sector to the private sector. But since the Partnerships Victoria policy the focus moved more towards delivering better projects as a result of bringing in the private sector expertise and also the government would regain direct control over the service or facility after the concession period.

The Partnerships Victoria team is part of the Commercial Division in the Department of Treasury and Finance of the Victoria state. The team is mainly responsible for overseeing projects implemented via the PPP practice and also developing guidelines and policies for PPP projects. Up to present, seventeen projects have already been implemented under Partnerships Victoria totaling AUD$5.5 billion (Partnerships Victoria 2008a). The team has also produced four policies, four guidelines, three technical notes and four advisory notes for the implementation of PPP projects in Victoria. These publications are targeted for the use of both the private and public sectors, and cover areas including the public sector comparator, risk allocation, standard commercial principles, tender process, interest rates etc. (Partnerships Victoria 2008b).

2.4 PPP experience in the United Kingdom
PPP projects now account for about 15 and 8 percent of infrastructure spent in the United Kingdom and Australia respectively (Ernst and Young, 2005). Up to 2006, 794 PPP/PFI deals had already been signed. The combined capital value was approximately £55 billion (National Audit Office, 2008). Amongst these projects almost 70% were in the health sector, and over 40% costing below £10 million (Akintoye, 2007). However, Maltby (2003) asserted that PPP/PFI should be abolished for smaller projects and for information technology schemes.

Partnership UK was set up in 2000 to succeed the Treasury Taskforce. The Taskforce was set up in 1997 to oversee the implementation of PPP/PFI projects. One observation is that Partnerships UK was initiated by the local Treasury. The team is generally responsible for providing project advice and support, developing government policies, providing co-sponsorship and participating in investment of PPP/PFI projects.

Due to the long history of PPP/PFI projects in the United Kingdom, Partnerships UK has a very comprehensive collection of guidelines and policies on implementing PPP projects for all sectors in many aspects. Case study reports can also be found on the public domain. Amongst the projects conducted by Partnerships UK it was noticed that the majority included projects for schools, hospitals and transportation. Other projects which have also been conducted include environment ones, leisure facilities, prisons and detention centers, housing etc. (Partnerships UK, 2008). The extent to which PFI could be used and the advantages created were the main drivers attracting other countries to start adopting or improve their practice in PPP.

3. The Research Framework

The findings presented in this paper are part of an on-going research project looking at developing a best practice framework for implementing PPPs. As part of the data collection, interviews were conducted with PPP experts that represented the public sector in both Hong Kong and Australia. This paper did not aim to provide a general overview of PPP in Hong Kong or Australia but instead tried to draw some commonalities and differences observed between the two jurisdictions.

3.1 Design of Interview Questions

The interviews which were carried out in this research study adopted the “Grounded Theory” approach. This approach is an iterative process by which the analyst becomes more and more “grounded” in the data and develops increasingly rich concepts and models of how the phenomenon being studied really works (Denzin and Lincoln, 2007). This approach involves the interviewer to collect word for word transcripts from the interviewees. These transcripts can then be further analyzed by identifying themes which are common and meaningful by an “open coding” technique. Therefore the findings will be solely based on the responses given by the interviewees.

Dainty et al. (2000) also adopted the Grounded Theory approach for construction management research. In their methodology they collected unstructured data and coded meaning information. This method allows the researcher to relate categories in complex ways and ensuring density and precision to the developed theory. They also believed that too much structuring would mean that the interviewees’ responses would be defined by the researcher. Hence, they used a semi-structured interview format. Their aim was not to promote consistency in terms of response, but to uncover as many relevant responses as possible. Consistencies would therefore emerge from the subsequent Grounded Theory analysis.

Raiden et al. (2008) agreed that structured questions would not allow interviewees to fully expand on their knowledge. This does not mean that the theory from literature should not be tested but its generalization should be tested with a population first.

Based on these concepts, interviews were conducted with experts from the public sector. The experts were selected based on two main criteria, these included:

1) The experts must possess adequate knowledge in the area of PPP; and
2) The experts have hands-on experience with PPP projects, or experience in conducting PPP research or have followed very closely with the development of PPP.
Based on the Grounded Theory approach, six interview questions linking up to the project objectives were derived for the interviews with the public sector interviewees. Table 2 shows how these objectives are linked to the interview questions. In the first question the interviewees were asked “Have you conducted any research looking at local case studies?” This question aimed to collect information for objectives 3 – 6. Question 2 “How would you compare PPP with traditional procurement methods?” targeted to achieve objectives 2, 4 – 6. Objectives 5-6 were covered again in Question 3 “Which type of project do you feel is best suited to use PPP?” and Question 4 “What do you feel are the key performance indicators in a PPP project?” In Question 5, interviewees were asked to answer “In general, what do you think are the critical success factors leading to successful PPP projects?” This question sought information for objectives 1, and 6. The final question was “Does your organization have any in-house guidance/practice notes?” This question aimed to collect information for objectives 1, 5 – 6.
| Question                                                                 | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------------------------------------------------------|---|---|---|---|---|---|
| Identify the benefits, difficulties and critical success factors of PPP. |   |   | ✓ | ✓ | ✓ | ✓ |
| Measure the effectiveness of PPP against other procurement methods.     | ✓ | ✓ |   |   |   |   |
| Identify representative case studies from countries such as Australia for analysis to identify their approach to success/failure. |   |   |   |   |   |   |
| Identify previous projects in Hong Kong that utilized a similar approach to PPP and to analyze their implementation successfullness. |   |   |   |   |   |   |
| Investigate the best conditions in terms of project nature, project complexity, project types and project scales under which the use of PPP is the most appropriate. |   |   |   |   |   |   |
| Evaluate the findings collected to determine a best practice framework for implementing PPP in Hong Kong. |   |   |   |   |   |   |

1. Have you conducted any research looking at local case studies?       |   |   | ✓ | ✓ | ✓ | ✓ |
2. How would you compare PPP with traditional procurement methods?     | ✓ | ✓ |   |   |   |   |
3. Which type of project do you feel is best suited to use PPP?         |   |   |   | ✓ | ✓ | ✓ |
4. What do you feel are the key performance indicators in a PPP project? |   |   |   | ✓ | ✓ | ✓ |
5. In general, what do you think are the critical success factors leading to successful PPP projects? | ✓ |   |   |   | ✓ | ✓ |
6. Does your organization have any in-house guidance/practice notes?    | ✓ |   |   |   | ✓ | ✓ |

Table 2 Project objectives linking up with interview questions
3.2 Selecting Respondents

The target respondents of the interviews were practitioners with experience in PPP of senior level and authority who have had experience representing the public sector. A total of fourteen interviews were conducted, with seven interviews conducted in each jurisdiction. Amongst the seven interviews conducted in Hong Kong, two were from Administration Departments (one of the interviewees previously represented a Works Department), three were from Works Departments (one of which previously represented an Administration Department and the other also holds a position at a local institute), two of the interviewees were from Non Governmental Organizations (NGO) (both had previously acted for different Works Departments). The Australian interviewees consisted of three government officials and four specialist advisers from the private sector. The government officials interviewed are from local state education and treasury departments. When arranging the interviews in Australia, it was found that the state governments tended to employ advisers from the private sector to act on their behalf in providing advice and expertise for selecting and monitoring the PPP project consortia. Therefore four advisers from the private sector were also selected for interview. Their roles were solely on behalf of the public sector hence their responses can also be regarded as the public sector’s view. Background details of these experts are shown in Tables 3 and 4 for Hong Kong and Australian interviewees respectively.

| No. | Position of Interviewee | Organization of Interviewee          |
|-----|-------------------------|-------------------------------------|
| PU1 | Assistant Director      | Administration Department           |
| PU2 | Permanent Secretary     | Administration Department (previously Works Department) |
| PU3 | Director                | Works Department (previously Administration Department) |
| PU4 | Senior Director         | Works Department                    |
| PU5 | Senior Quantity Surveyor| Works Department / Local Professional Institute |
| PU6 | Executive Board Member  | NGO (previously Works Department)   |
| PU7 | Executive Director      | NGO (previously Works Department)   |

Table 3 List of Interviewees from the Public sector in Hong Kong

| No. | Position of Interviewee | Organization of Interviewee          |
|-----|-------------------------|-------------------------------------|
| PU8 | Executive Director      | Education Department                |
| PU9 | Director                | Treasury Department                 |
| PU10| Executive Manager       | Treasury Department                 |
| PU11| Executive Director      | Transaction Adviser                |
| PU12| Partner                 | Legal Adviser                       |
| PU13| Head                    | Finance Adviser                     |
| PU14| Director                | Finance Adviser                     |

Table 4 List of Interviewees from the Public sector in Australia

4. A Comparison of the public sector’s perspective in Hong Kong and Australia

Table 5 shows a summary of the responses to each question given by the fourteen interviewees. The number of times that each response was given was tallied. Where the response was only given once it was believed to be insignificant for further analysis. For the responses given more than once, these were tabulated and further analyzed as shown in Tables 6 to 11. The numbers in brackets represents the number of times the response was mentioned by interviewees.
### 1. Have you conducted any research looking at local case studies? And if so, could you share your insights?

| Local case studies | Australian Interviewees | Hong Kong Interviewees |
|--------------------|--------------------------|------------------------|
| Yes | PU1 | PU2 | PU3 | PU4 | PU5 | PU6 | PU7 | Total |
| No | PU8 | PU9 | PU10 | PU11 | PU12 | PU13 | PU14 | Total |

- PU1: 1
- PU2: 3
- PU3: 4
- PU4: 2
- PU5: 2
- PU6: 1
- PU7: 2
- PU8: 2
- PU9: 2
- PU10: 2
- PU11: 2
- PU12: 2
- PU13: 2
- PU14: 2

### 2. How would you compare PPP with traditional procurement methods?

| Using a Public Sector Comparator | Australian Interviewees | Hong Kong Interviewees |
|----------------------------------|--------------------------|------------------------|
| Yes | PU1 | PU2 | PU3 | PU4 | PU5 | PU6 | PU7 | Total |
| No | PU8 | PU9 | PU10 | PU11 | PU12 | PU13 | PU14 | Total |

- PU1: 2
- PU2: 1
- PU3: 1
- PU4: 1
- PU5: 2
- PU6: 1
- PU7: 1
- PU8: 2
- PU9: 1
- PU10: 1
- PU11: 1
- PU12: 1
- PU13: 1
- PU14: 1

### 3. Which type of project do you feel is best suited to use PPP?

| Link between performance and payment | Australian Interviewees | Hong Kong Interviewees |
|--------------------------------------|--------------------------|------------------------|
| Yes | PU1 | PU2 | PU3 | PU4 | PU5 | PU6 | PU7 | Total |
| No | PU8 | PU9 | PU10 | PU11 | PU12 | PU13 | PU14 | Total |

- PU1: 3
- PU2: 2
- PU3: 2
- PU4: 2
- PU5: 2
- PU6: 2
- PU7: 2
- PU8: 2
- PU9: 2
- PU10: 2
- PU11: 2
- PU12: 2
- PU13: 2
- PU14: 2
4. What do you feel are the key performance indicators in a PPP project?

| Indicator                                      | Yes | No | Refer to others |
|-----------------------------------------------|-----|----|-----------------|
| Project performance                            | ✓   |    |                 |
| Resources saved                                | ✓   |    |                 |
| Contractor’s performance                       | ✓   |    |                 |
| Traditional KPIs: Cost, time, quality          | ✓   | ✓  |                 |
| Risk Management                                | ✓   | ✓  |                 |
| Public acceptance                              | ✓   |    |                 |
| Value for money achieved                       |     | ✓  |                 |
| Service outcomes                               |     | ✓  |                 |
| Contract terms                                 |     | ✓  |                 |
| Payment mechanism performed                    |     | ✓  |                 |
| Traditional KPIs: Cost, time, quality          | ✓   | ✓  |                 |
| Risk Management                                | ✓   | ✓  |                 |
| Public acceptance                              | ✓   | ✓  |                 |
| Value for money achieved                       |     | ✓  |                 |
| Service outcomes                               |     | ✓  |                 |
| Contract terms                                 |     | ✓  |                 |
| Payment mechanism performed                    |     | ✓  |                 |

5. In general, what do you think are the critical success factors leading to successful PPP projects?

| Factor                                           | Yes | No | Refer to others |
|--------------------------------------------------|-----|----|-----------------|
| Champion                                         | ✓   |    |                 |
| Large project capital value                      | ✓   |    |                 |
| Well prepared contract/document                  | ✓   |    |                 |
| Partnership spirit/commitment/trust              | ✓   | ✓  |                 |
| Transparent process                              | ✓   | ✓  |                 |
| Project objectives well defined                  | ✓   | ✓  |                 |
| Public consultation                              | ✓   | ✓  |                 |
| Appropriate risk allocation                      | ✓   | ✓  |                 |
| Large operating element                          | ✓   |    |                 |
| Development potential                            | ✓   |    |                 |
| Economic business case                           | ✓   | ✓  |                 |
| Effective negotiations between parties           |     | ✓  |                 |
| Competitive procurement process                  |     | ✓  |                 |
| Government support                               | 0   | ✓  |                 |
| Skilled and experienced parties                  |     | ✓  |                 |
| Clear milestones                                 |     | ✓  |                 |
| Initiate project                                 | 0   | ✓  |                 |
| Value for money                                  |     | ✓  |                 |

6. Does your organization have any in-house guidance/practice notes?

| Answer                           | Yes | No | Refer to others |
|----------------------------------|-----|----|-----------------|
| Yes                              | ✓   |    |                 |
| No                               | ✓   | ✓  |                 |
| Refer to others                  | ✓   | ✓  |                 |

Table 5 Summary of responses from interviewees
4.1 Research on local case studies

Table 6 shows the responses of Question 1 “Have you conducted any research looking at local case studies?” that were given more than once. The findings show that three different responses were given by Hong Kong interviewees and four were given by the Australians. Amongst the four responses given by the Australian interviewees, three were the same as those given by the Hong Kong interviewees. The response which was given most by both groups of interviewees was “Other research conducted”, mentioned five times for each. This finding showed that irrespective of geographical locations the interviewees tended to conduct other research besides case studies on PPP. The response “Local case studies” was mentioned four times by the Australians. It is possible that because Australia has had much experience in conducting PPP projects, they do not need to look elsewhere to learn from the experience of others, instead they can refer to their own projects as reference material. As mentioned previously the Victoria state in Australia for example has a large range of guidance materials on the public domain which other states can refer to when conducting PPP projects (Partnerships Victoria, 2008b). On the other hand the Hong Kong interviewees mentioned “International case studies” three times showing there need to learn from the experience of others. The Efficiency Unit of the HKSAR Government has also been known to be interested in international case studies. They have also published a number of case study reports for PPP projects in the United Kingdom and Australia (Efficiency Unit, 2008b). The Australians also mentioned this response two times. From the interviews it was found that the involvement in research was “Not mentioned” twice by each group of interviewees.

| Hong Kong Interviewees | Australian Interviewees |
|------------------------|-------------------------|
| Other research conducted (5) | Other research conducted (5) |
| International case studies (3) | Local case studies (4) |
| Not mentioned (2) | Not mentioned (2) |
| International case studies (2) | |

Table 6 Question 1 - Have you conducted any research looking at local case studies?

4.2 Comparing PPP with traditional procurement methods

Table 7 shows the responses mentioned more than once by both groups of interviewees for Question 2 “How would you compare PPP with traditional procurement methods?” Three and two different responses were mentioned more than once by the Hong Kong and Australian interviewees respectively. For all three responses mentioned by the Hong Kong interviewees each was mentioned twice. Mentioned the most by Australian interviewees was “PPP utilizes private sector finance/difference in finance structure” which was mentioned four times. This finding shows the importance of the different financing structure provided by PPP projects. Although finance should not be the main reason for adopting PPP projects, undoubtedly, financial drive is still an attractive factor to governments, hence this response was unsurprising. Mentioned by both groups of interviewees was the response “PPPs gain private sector’s added efficiency/expertise/management skills”. This response was also mentioned twice by the Australian interviewees. From previous literature it has also been recorded that one of the main advantages of involving the private sector is to add value to public projects in terms of their efficiency, expertise and management skills when compared to those of the public sector (Yescombe 2007; Carrillo et al. 2008; Leiringer 2006; Chiang and Cheng, 2009). Other response mentioned by the Hong Kong interviewees included “Using a Public Sector Comparator”, which was also mentioned by the Efficiency Unit (2003) of the HKSAR government as necessary whenever public money is involved. Also “Each project unique” was mentioned the Hong Kong interviewees too.

| Hong Kong Interviewees | Australian Interviewees |
|------------------------|-------------------------|
| Using a Public Sector Comparator (2) | PPP utilizes private sector finance/difference in finance structure (4) |
| PPPs gain private sector’s added efficiency/expertise/management skills (2) | PPPs gain private sector’s added efficiency/expertise/management skills (2) |
| Each project unique (2) | |

Table 7 Question 2 - How would you compare PPP with traditional procurement methods?
4.3 Projects best suited to use PPP

The Interviewees were asked to answer “Which type of project do you feel is best suited to use PPP?” in Question 3. Table 8 shows their responses that were mentioned more than once. The results showed that only one similar response was mentioned by both groups of interviewees. This was “Economic business case” which was mentioned three times by both groups of interviewees and also mentioned the most. The private sector parties are businessmen, so for them to participate in PPP projects there must be reasonable financial benefits foreseeable for them. Partnerships Victoria (2001) explains how developing a business case is a key step in the decision-making process. This is where the project is fully scoped and risks and costs are identified to develop a cost-benefit analysis, as well as to test the net benefit of the proposal. The Hong Kong interviewees suggested only one more criteria for PPP projects, which was “Large operating element/cost” which was mentioned twice. One typical feature of PPP projects is that the consortium is normally responsible for the operation and maintenance of the project. Without this element PPP projects would be similar to projects procured traditionally. Therefore the operation part must constitute a reasonable proportion of the project. Grimsey and Lewis (2004) listed a number of public private business models prior to the more general term PPP, many of these emphasized the operation element of the structure within its name, showing the highly important role in these arrangements including: Operate and Maintain (O&M); Operate Maintain and Manage (OM&M); Build Transfer Operate (BTO); Build Operate Transfer (BOT); Build Own Operate Remove (BOOR); Build Own Operate Transfer (BOOT); Lease Renovate Operate Transfer (LROT); Design Build Finance Operate (DBFO); Design Build Finance Operate Manage (DBFOM); Build Own Operate (BOO) etc. Other response given by the Australian interviewees included “Scope for innovation” (Eaton et al. 2006) which was mentioned three times. Also, mentioned twice each by the Australians included “Performance easily measured” (Partnerships Victoria 2001), “High project value” (HM Treasury 2003) “Any nature” and “Sufficient risk transfer” (Jin and Doloji 2008). These features forming suitable PPP projects have been previously recorded by other researchers.

Hong Kong Interviewees
- Economic business case (3)
- Large operating element/cost (2)

Australian Interviewees
- Economic business case (3)
- Scope for innovation (3)
- Performance easily measured (2)
- High project value (2)
- Any nature (2)
- Sufficient risk transfer (2)

Table 8 Question 3 - Which type of project do you feel is best suited to use PPP?

4.4 Key performance indicators in PPP projects

The interviewees were also asked to answer Question 4 “What do you feel are the key performance indicators in a PPP project?” (Table 9). Amongst the responses received, three were mentioned more than once by the Hong Kong interviewees and four by the Australian interviewees. The response “Contract terms” was mentioned the most at four times by the Australian interviewees. In Australia high priority is given to the contract component of projects procured by PPP. Guidelines have also been published on this aspect (Partnerships Victoria 2008c). The response mentioned the most by Hong Kong interviewees was “Traditional KPIs: Cost, time, quality” (Enshassi et al., 2009). Probably due to the lack of experience in PPP projects (not including BOT type projects), the Hong Kong interviewees did not commonly come up with any responses that were specifically related to PPP projects solely. Only one response was raised by both groups of interviewees, this was “Contractor’s performance” which was mentioned twice by each group of the interviewees. Also mentioned twice by the Australian interviewees were the responses “Project performance” and “Risk Management”. The performance of the contractor and project are items which would definitely be mentioned in the contract documents, these again confirm the importance of the contract to the Australian interviewees. Many studies have been conducted on the importance of risks in PPP projects (Abbikli and Eaton 2004; Li et al. 2004; Li et al. 2005; Shen and Wu 2005; Roumboutsos and Anagnostopoulos, 2008). One of the main reasons for implementing public projects by PPP is also for risk transfer, therefore to classify the risk management as a performance indicator is also reasonable. Another response mentioned by Hong Kong interviewees was “Resources saved”. PPP projects are normally only conducted after they have been proved to be a cheaper alternative to traditionally procured
projects. This is normally conducted via the Public Sector Comparator (Efficiency Unit 2003; Partnerships Victoria 2008b).

| Hong Kong Interviewees | Australian Interviewees |
|------------------------|-------------------------|
| Traditional KPIs: Cost, time, quality (3) | Contract terms (4) |
| Contractor’s performance (2) | Contractor’s performance (2) |
| Resources saved (2) | Project performance (2) |

Table 9 Question 4 - What do you feel are the key performance indicators in a PPP project?

4.5 Critical success factors leading to successful PPP projects

Question 5 “In general, what do you think are the critical success factors leading to successful PPP projects?” received the most variation of responses from the interviewees (Table 10). This probably indicated that there are many ways for PPP projects to achieve success. For responses that were mentioned more than once, there were six from the Hong Kong interviewees and nine for the Australian interviewees. Amongst these only two were similar for both groups of interviewees, these included “Project objectives well defined” which was mentioned three times by each group of respondents and “Partnership spirit/commitment/trust” mentioned twice by each group of interviewees. As mentioned by the Efficiency Unit (2008c) and the Queensland Government (2008) the objectives/output specification of a PPP project must be well defined. The importance of partnership spirit was also identified by Gunnigan and Eaton (2006). The mentioned most frequently by Australian interviewees was “Competitive procurement process” (Jeffries et al., 2002) at five times, followed by “Skilled and experienced parties” (Drew, 2005; Kumaraswamy and Anvuur, 2008) at four times, “Champion” (Efficiency Unit, 2008a) and “Clear milestones” (Civic Exchange et al., 2005) both three times and “Economic business case” (Chege, 2001), “Government support” (Qiao et al., 2001) and “Value for money” (Heald, 2003) all twice. Mentioned the most by Hong Kong interviewees was “Appropriate risk allocation” (Li et al., 2005) at four times, “Public consultation” (Kanakoudis 2007) at three times and “Well prepared contract/document” (Partnerships Victoria 2008c) and “Transparent process” (United Nations Economic Commission for Europe 2004) both at two times. The majority of these critical success factors have also been summarized by (Aziz, 2007).

| Hong Kong Interviewees | Australian Interviewees |
|------------------------|-------------------------|
| Appropriate risk allocation (4) | Competitive procurement process (5) |
| Public consultation (3) | Skilled and experienced parties (4) |
| Project objectives well defined (3) | Project objectives well defined (3) |
| Well prepared contract/document (2) | Champion (3) |
| Transparent process (2) | Clear milestones (3) |
| Partnership spirit/commitment/trust (2) | Partnership spirit/commitment/trust (2) |
| Economic business case (2) | Government support (2) |
| Government support (2) | Value for money (2) |

Table 10 Question 5 - In general, what do you think are the critical success factors leading to successful PPP projects?

4.6 In-house guidance/practice notes

For Question 6 “Does your organization have any in-house guidance/practice notes?” it was found that the majority of the interviewees (six out of seven) in Australia responded “Yes”, whereas only three interviewees in Hong Kong agreed (Table 11). Four Hong Kong interviewees responded “No” and two responded “Refer to others”. This finding has shown that the Australians were much more likely to have their own guidance materials, whereas for the Hong Kong interviewees the responses varied. Australia has implemented many more PPP projects compared to Hong Kong; hence they can also be regarded as much more experienced. The Victoria state in Australia alone has implemented seventeen projects under the Partnerships Victoria arrangement (Partnerships Victoria 2008a) as mentioned previously. On the other hand, not considering the previous projects conducted by BOT, Hong Kong has only completed a couple of PPP projects.
5. Conclusions

This paper has studied the public sector’s perspective on procuring public works projects via findings from fourteen interviews conducted in Hong Kong and Australia. Government officials and advisers with experience in PPP projects and research were invited to answer six questions related to the implementation. The results found that interviewees from both jurisdictions had conducted some kind of research in the area and had looked at international cases. This finding has shown that governments in both jurisdictions have shown an interest in other sources of information besides real cases and also both are keen to learn from international experiences. Therefore other governments can also consider using a similar approach if they have not already done so. The results from this question enabled objectives 3 – 6 to be achieved. Both groups of interviewees also found that the main difference between PPP and traditional projects is that in a PPP project there is the added advantage of the private sector’s efficiency/expertise/management skills involved. Therefore other governments could consider whether this added advantage is required from the private sector when they consider whether or not to opt for the PPP model in their public work projects. The interviewees from Hong Kong also suggested using the Public Sector Comparator as an indicator to determine the preference between the methods. Other criteria recommended by the Australian interviewees were the private sector financing and finance structure of the project. Again these could be used as indications to which method to opt for. These findings helped to achieve objectives 2, 4 - 6. The interviewees were asked which projects would be suitable to use PPP; both groups suggested that it would be crucial for projects to be economically viable. Another important feature according to the Australian interviewees is scope for innovation. Objectives 5 – 6 were therefore achieved. It was suggested by both groups of interviewees that the contractor’s performance would be the key performance indicator in a PPP project. The Hong Kong interviewees also suggested that the traditional key performance indicators such as cost, time and quality are also important. The Australian interviewees suggested that the contract terms should be considered. These findings are valuable for measuring the performance of a PPP project for both the public and private sectors. Again, objectives 5 – 6 were achieved. Common critical success factors mentioned by both groups of interviewees included the project objectives being well defined and a partnering spirit/commitment/trust. These factors should be considered by all parties before the project begins to ensure that they are achieved. The Hong Kong interviewees also felt strongly that an appropriate risk allocation would achieve success in the project. For the Australian interviewees a competitive procurement process was the most important success factor. Objectives 1 and 6 were therefore achieved from these findings. Lastly it was found that all the interviewees from Australia and some of the ones from Hong Kong had a practice of having their own organization guidance/practice notes. This practice is highly recommended and especially useful for individuals and companies that are inexperienced with the PPP practice. From these findings objectives 1, 5 - 6 were achieved again. From the findings of two completely different jurisdictions that have already implemented PPP, the industry at large will understand better which types of projects should be procured by PPP and how these can be delivered the most effectively. In addition, the findings presented in this paper have formed a comparative study looking at implementation of PPPs in Hong Kong and Australia.

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