

PUBLIC PRIVATE PARTNERSHIPS: THE PROVISION OF HEALTHCARE INFRASTRUCTURE IN AUSTRALIA

Marcus Jefferies¹, Thayaparan Gajendran and Graham Brewer

School of Architecture and Built Environment, University of Newcastle, Callaghan, NSW 2308, Australia

The emergence of Public-Private Sector Partnerships (PPPs) provides a means for developing infrastructure without directly impacting upon the budgetary constraints of Government. Social infrastructure projects (schools, hospitals, prisons et al) are characterised as generally being smaller in scale than economic infrastructure projects (motorways, bridges, tunnels et al). However, by their very nature, social infrastructure projects also tend to be complex, particularly in terms of on-going involvement with the community. Thus, private sector bidders for social infrastructure PPPs are often presented with a situation where operational complexity, including government policy toward the sharing of revenue, is one of the key differences in whether PPPs are as attractive for social infrastructure compared with economic infrastructure. This research centres on how consortiums manage the many risk factors involved and the results are presented from a case study of a hospital PPP project. This paper presents the preliminary findings of the case study research and in particular focuses on the process for selecting the PPP consortium and the research methodology.

Keywords: Australia, healthcare, procurement, public-private partnership, social infrastructure.

INTRODUCTION

Public private partnerships (PPPs) are long-term arrangements between public and private sector organisations for the provision of infrastructure involving allocation of project functions to optimise risk management and maximise value for money (Akintoye et al., 2003; Commonwealth of Australia, 2002). Contemporary PPP models emerged in the UK in the 1980s as a result of the requirement for improved infrastructure and the public sector's inability to meet demand within the confines of conventional financing methods (Watson, 2003; Commonwealth of Australia, 2002).

The first PPPs were for economic infrastructure such as major road projects, which provide an income stream either from user charges, or shadow tolls paid by the government for each vehicle, to the private sector operator (English and Guthrie, 2003; Tillman, 1997). This new method of infrastructure provision soon emerged in Australia where early PPPs included the Sydney Harbour Tunnel and Melbourne's Citylink Expressway, which are both toll roads (Grimsey and Lewis, 2002; DOTARS, 2002). PPPs in Australia are now rationalised by 'value for money' and this has led to

¹ Marcus.Jefferies@newcastle.edu.au

the emergence of social infrastructure PPPs such as hospitals, schools and housing (NSW Government, 2000; Commonwealth of Australia, 2002).

In 2002, the New South Wales (NSW) Government identified over \$4 billion worth of emerging privately financed projects (PFPs) for the next four years, and in excess of \$13 billion of major project proposals worth over \$100 million, to be implemented over the next decade, including many social infrastructure projects (NSW Government, 2002; Allen et al., 2004). This projected growth presents a range of research opportunities, particularly for social infrastructure projects.

This paper focuses on risk management issues in a social infrastructure PPP project, i.e. the Newcastle Mater Hospital redevelopment, which has stimulated public debate stemming from considerable apprehension within the employee and community stakeholder groups, as the first health sector PPP proposal in the Hunter region. This paper presents preliminary findings of the case study project and focuses on the establishment and rationale for the PPP and discusses the research methodology used.

HEALTH SECTOR PUBLIC PRIVATE PARTNERSHIPS

Public Private Partnerships (PPPs) are broadly defined as partnerships or financial arrangements between the public (Government) and private sectors for the purposes of implementing projects that have traditionally fallen within the remit of the public sector (McCann-FitzGerald, 2000; Akintoye et al, 2003; Walker and Hampson, 2003; Blake 2004; Jefferies and McGeorge, 2009). PPPs involve the sharing of responsibilities and the Australian Procurement and Construction Council (APCC) (2002) identifies government procurement through a PPP as involving the private sector delivering certain services for government and creating, financing, operating and sometimes owning any necessary new asset.

In the early years of Australian health sector PPPs, the contracts were predominantly adapted from the Build-Own-Operate-Transfer (BOOT) arrangement, whereby new hospitals were constructed and operated privately (Dowdeswell and Heasman, 2004). This strategy presented limited success and Australian governments have subsequently declared a commitment to provide the core services in social infrastructure, such as clinical services in hospitals, meaning that the roles filled by the private sector are generally support services (English and Guthrie, 2003; NSW Treasury, 2002). Tasks commonly transferred to the private sector in PPP developed hospitals include maintenance, catering, porter services, laundry, waste and other non-core services (De Lemos et al, 2003).

The Australian health sector is relatively inexperienced in PPPs, however, the contemporary approach has been developed based on international experience such as the Private Finance Initiative (PFI) in the UK (English and Guthrie, 2003). Australian state governments that have implemented health sector PPPs have had limited success, with certain projects being declared 'failures' by some factions. Three Australian healthcare projects that have been completed in the last 10 years are: Port Macquarie Base Hospital in NSW; Latrobe Regional Hospital in Victoria; and Berwick Community Hospital in Victoria.

Theoretical case analysis has been completed for these three healthcare projects. The main issues are summarised below and based upon the findings of Allen (2001); English (2004); Fitzgerald (2004); Abelson (2005); Hodge and Greve (2005); Chung (2008); NSW Treasury (2009); and Victorian Government (2010):

- early PPP's seem to have Governments focusing heavily on:

- transferring risk to the private consortiums
 - undertaking development with what offers the lowest costs
- lack of due diligence by the public/private sectors which has seen the Government lose significant funds in having to buy incurred failures and debt
- for the transfer of risk, Governments seem to be paying excessive rates for services (however, the Government will bear the ‘ultimate’ risk if default or inadequate performance occurs and health services still need to be delivered)
- BOO type projects seem to:
 - have failed due to the private sector assuming/expecting to deliver services provided previously by the public sector more efficiently
 - be an affect of government policy of the time to transfer risk to meet ‘value for money’ benchmarks (for which they have not)
- the issuing by the Government of 99 year leases to the private sector even though the concession agreements may be only for 20-25 years seem to not be in the public's best interest
- the ‘build’ component of PPP procurement has been completed effectively on time and on budget
- risk transfer and assumptions needs to be better evaluated and analysed by both public / private parties
- accounting practices and the application of discount rates, providing consistency etc. for determining the Government's contract obligations need to be more rigorous and not be reliant on comparisons with the ‘PSC’
- management of applying best practice, disclosure and conflicts of interest
- Partnerships Victoria policy 2005 implemented in 2005 and providing additional guidelines known as the Standard Commercial Principles which outlined and identify risks and who maybe best able to manage them
- PPP BOOT-type arrangements seem to be more effective in the delivery of health services (subject to risk transfer) specifically with the Government delivering clinical services.

PPPs are increasingly becoming the preferred option for Government's to deliver a range of services in social infrastructure, particularly healthcare (Jefferies et al, 2007). According to Jefferies and McGeorge (2008), current government policy limiting risk allocation and the sharing of business operation is a restricting factor for private sector stakeholders in the development of a successful revenue stream. They also indicate that Social infrastructure PPPs have relatively higher bid costs compared to economic PPPs with only a marginal increase in business opportunity. The key to a successful project is the identification and allocation of risks to the best party to manage such risks during the tender stage (Jefferies and McGeorge, 2008; 2009). Therefore, with the partnership between the public and private sectors there must be a revised approach to the allocation of risks.

RESEARCH METHOD

A single case study approach

A qualitative single case study strategy was proposed in order to “*investigate a contemporary phenomenon within its real-life context*” (Yin, 2003, p13). The single-case rationale lies in the unique opportunity presented by the case study project and the limited number of healthcare PPP projects in Australia and in particular in the

State jurisdiction of New South Wales. The method initially consisted of a literature review that identified current theory regarding risk management of PPPs. Case study data collection then went on to firstly analyse project documentation which was used to establish project background information and establish the parameters for the interview component of the research. A semi-structured face-to-face interview format was then used and data analysed using a content analysis approach.

Yin (2003) describes two types of case studies, being exploratory and descriptive. “*An exploratory case study will be utilised to satisfy the objectives of the study*”. This was achieved through the interview process conducted with senior project personnel. A qualitative approach has been used as the main focus of the research to explore the ‘nature of inquiry into a human process’, i.e. the development of the risk management process at the tender/bid stage of a PPP project. Subsequently, the case study method adopted, supported by Yin’s (2003) research design, inspires researchers to produce an investigation of the utmost quality by following a set of four principles. The first principle is the need to examine a ‘case’ within its ‘real-life’ context; the second principle provides a platform for an appropriate methodology within the context of the research; the third principle concentrates on data compilation and analysis; and the final principle is that the researcher must explain the findings and establish conclusions that will lead to further the analysis of the topic.

A case study is an experimental investigation that studies a contemporary phenomenon within its real-life context (Waal, 2007). Yin (2003) highlights single cases as being used to confirm or challenge a theory, or in order to represent a unique or extreme proposition. As PPPs are a relatively new and unique phenomenon the multiple case study approach is somewhat irrelevant in this instance given the limited extent of social infrastructure PPPs such as hospitals.

Case study participants

The selected project for the case study is the Mater Hospital, which is a current social infrastructure PPP project. The participating organisation, Lend Lease, was selected as they were the representative of the client (NSW Government) on the case study project (Mater hospital) and were instrumental in terms of developing the PPP risk and contractual documentation. Lend Lease staff interviewed as part of the case study project had significant experience with PPPs both on a national and global basis. These experiences range in varying capacities from representing both private and public sectors in providing initial expressions of interests to leading full tender preparation and evaluation of major PPP projects.

Data collection and analysis

Case study data collection involved analysing project documentation, such as contract summary documents, to establish background information and establish the parameters for the interview component of the research. A semi-structured face-to-face interview format was then used and data analysed using a content analysis approach. The intention of the interview process was to focus on risk factors identified by key senior management involved in developing both the project’s risk profile and contract. To ensure this data was accurate and reliable, all participants must have played a leading role (e.g. Project Manager, Contract Manager et al) and have previous experience with PPPs and large-scale construction projects. The participant organisation then selected individuals to complete the interview process that aimed at capturing their perspectives on risk management approaches used in the project.

THE CASE STUDY PROJECT: THE MATER HOSPITAL REDEVELOPMENT

Project background

The New South Wales (NSW) Government in conjunction with the Department of Health developed an Action Plan for NSW Health incorporating key principles in to improve the state's health services. As described in Lend Lease (2002), the implementation of these principles by Hunter Area Health via the Hunter Strategy – an area wide strategic resource plan that promotes the effective management of the area's finances, people, information technology and physical assets, as well as the effective use of the resources of the private sector. Part of the Hunter Strategy is the Newcastle Strategy (Mater Hospital re-development forms 1 of 4 projects) and involves major new upgrade works initiatives by the NSW Government. These projects were to be originally procured under conventional arrangements from the Department of Health's Capital Works budgets.

Prior to the PPP proposal, the Mater was a functioning hospital. However, the buildings were out-dated and inappropriate for tertiary cancer services, emergency medicine and mental health. Many of the buildings were obsolete and it was the preferred option to redevelop the Mater as an integral part of the Newcastle Strategy.. There have been numerous studies over the past twenty years that have clearly established that many of the Mater's buildings are beyond, or are reaching the end of, their economical life (Lend Lease 2002, p18). Current ownership of the facility is held by the Little Company of Mary Health Care (as an affiliated health organisation) and the hospital continues to provide services to the community in the Catholic tradition. The Calvary Mater Newcastle has an agreement with the Hunter New England Health Service to provide a number and range of health services to agreed quality standards (NSW Health, 2004, p.7). These arrangements are completed under a Labour Services Agreement whereby public sector funding and public sector health employees (who remain public sector employees of the Hunter New England Area Health Service) are used for clinical purposes. Jointly, these 2 entities provide health care services at the Mater (Hunter New England Health Services, 2009, p2).

The PPP process

From the initial concepts envisaged under the Hunter Strategy, a more detailed analysis was completed under the Newcastle Strategy and revealed a greater scope of works was required due to *“substantial upgrades and demand for additional services....which far exceeded the available public funding”* (Lend Lease, 2002). Due to the financial constraints with the existing deficiency in the NSW Health budget, the NSW State Government considered alternatives besides delivering a staged Mater Hospital redevelopment using the conventional Capital Works budget. In June 2003, the NSW Government entered into an agreement with the then owners of the Hospital site (NSW Health, 2005, p.3) for *“an Agreement for Lease and Initial Project Agreement for the Redevelopment of the Mater Hospital.”* This agreement established the parameters by which a redevelopment could be considered using private funding.

While no certainty on a procurement method had been decided, NSW Health had formulated through workshops facilitated in June 2010 by Lend Lease (the Government's procurement partner) a list of *“generic risks likely to be found in the design and construction of health facilities”* which were later defined within the Project Definition Plan. The process began in April 2002, when a preliminary risk

review was conducted and focused on *“the initial processes rather than later delivery risks and the risk review focused on the elements with higher level risk profiles”* (Hunter Health, 2002, Section 8, p.2) relative to development, management and delivery of the Mater Project. This process of risk identification was continued through an intensive stakeholder engagement process, with six (6) key risk area headings identified:

- Quality of service/Quality of hospital product
 - Timely delivery/Costs within budget
 - Disruption to hospital activities during delivery
 - Urban development
 - Equality and availability of opportunity
 - Information and consultation
- (Hunter Health 2002, p.3)

Following evaluation of the significant risks by the NSW Government it was considered in August 2003 that the hospital would be procured using a PPP. NSW Health (2004, p.3) has stated that the *“Project will be undertaken within the framework of the NSW Health’s ‘Working with Government Policy and Guidelines for Privately Financed Projects’ ”*. NSW Health, in establishing a commercial framework for the project, wanted to maximise the private sector’s role by transferring risks and allowing the consortiums to produce *“innovative design, engineering, operating and commercial solutions”* (NSW Health, 2004, p.3). The ideology of NSW Health appointing a procurement partner would assist in realigning its asset management objectives and still allow delivery of the aims of the Newcastle Strategy.

The proposed redevelopment

The agreement between the NSW Government and the proposed private sector consortium involves over a project term of 28 years the financing, design, construction and commissioning of: new hospital buildings; refurbishment of the old Mater Hospital; transfer of local mental health services onto the site; and maintenance of buildings, car-parks and grounds, utility supply; and management services (operational services et al). In addition, the consortium will provide a range of ‘non-clinical services’ (security, catering, cleaning, general services et al) while managing public sector health employees (who remain public sector employees of the Hunter New England Area Health Service) under a Labour Service Agreement.

The proposed revenue streams from the Government to the private sector are on a monthly performance based payment structure which begins when the hospital is operational. The payments relate to the finance (initial project capital investment); design, construction, & commissioning; and the maintenance and operation of the hospital including the management of the health sector employees. As stated by Lend Lease (2002, p.35), the “monthly service payment (subject to abatement for non-performance) is made up of volume adjustments (catering, clinical waste), energy payments, and additional payments (groceries, security guards)”. The Mater Hospital is the first hospital in New South Wales to be built, maintained and operated by the private sector under a PPP, and is the largest provider of radiation oncology services in NSW (Infrastructure Partnerships Australia, 2009). The redevelopment will provide a 176 bed hospital, new mental health facility, and new radiotherapy facilities.

PPP expression of interest/detailed proposals process

In October 2003, “*a Call for Expressions of Interest*” (NSW Health, 2005, p.3) by the NSW Department of Health occurred with 6 consortiums responding at the close in November 2003. An Evaluation Committee assessed the proposals on:

- design and construction experience;
 - facilities management experience;
 - structures, risk management and financial experience;
 - financial experience and financial strategies; and
 - by applying a ‘percentage weighting criteria’ to distinguish proposals.
- (NSW Health, 2005, pp3-4)

Three respondents were short-listed to present ‘Detailed Proposals’ with one withdrawing prior to the ‘Request for Detailed Proposals’. The ‘Request for Detailed Proposals’ was issued in August 2004 and in December 2004 two private sector consortiums had lodged bids. Assessment of the ‘Detailed Proposals’ by the Evaluation Committee was broadly based on financial, commercial, technical and services issues, legal and costs parameters (NSW Health, 2005, p.4) which were greater defined by the following criteria:

- design;
- construction and commissioning;
- service delivery; commercial;
- financial; and
- probity compliance.

(NSW Health, 2005).

Again a percentage weighting criteria was used to distinguish the proposals. However after evaluation of payment and risks, it was concluded that neither proposal had effectively established value for money to the Government. It was considered that negotiations should continue to improve the deficiencies within the proposals that had been provided to date, and the preferred bidder needed to satisfy several criteria with a specific focus on:

- Costs below those of the public sector comparator;
- Compliance with the project’s design requirements, as ‘represented’ by the ‘reference project’ and the project’s technical specifications;
- Compliance with the project’s services requirements, in its services and technical specifications; and
- An ‘acceptable’ risk position, documented in a draft Project Deed.

(NSW Health, 2005, p.6)

NSW Health and Novacare’s (one of the private sector consortia) preferred individual position was reviewed in relation to certain risks and whether that risk was considered high, medium or low to the Government. The re-evaluation of the proposals occurred in June 2005 under the same weighting criteria and in December 2005 it was publicly announced that contracts had been executed between the Government and the Novacare Consortium. NSW Treasury calculated that the Novacare proposal would provide a ‘net present cost’ saving to the Government of approximately 2% when compared to a traditional public delivered procurement model over the contractual PPP term. Novacare’s bid price of approximately \$378.8 million was exclusive of certain risks. Through negotiations with NSW Treasury, a \$1.7 million estimate of

those excluded risks was added to the price to allow a comparison with the Public Sector Comparator. As shown in Table 1, it compares Novacare's contractual price (risk adjusted) against the 'Public Sector Comparator'.

Table 1: Value for money comparison between public sector and private sector project delivery

Delivery method	Public sector comparator (PSC) (hypothetical, risk-adjusted estimate of the cost of the most efficient likely method of public sector delivery)			Private sector delivery (as Contracted)
	PSC best case (95% probability that PSC cost would be higher than this)	PSC likely case (mean of PSC cost estimates)	PSC worst case (95% probability that PSC cost would be lower than this)	
Estimated net present value of the project cost (over 28 years) to the NSW Health	\$384.1 m	\$388.7 m	\$393.7 m	\$380.5 m
Estimated saving through private sector delivery	0.9%	2.1%	3.4%	

As identified within the interview process with Lend Lease (Government's Procurement Partner) the final contractual negotiations between the Government and the private sector consortium saw *"minimal changes to the risk profile"* to what the Government had previously established. As stated *"The Governments preferred position ultimately was to allocate the risk to the party who would be best to manage that risk, and determine what proportion of cost was associated to accepting that risk by either party."*

PPP Contracting Parties

The Novacare Consortium is made up of the following parties: Westpac (Consortium Leader and Financier); Medirest (Soft Facilities Management); Honeywell (Hard Facilities Management); and Abigroup (Design and Construction Contractor). The contractual rights and obligations are specified within the PPP Project Deed. Project securities are based on the negotiated acceptances of risks on the design, construction, commissioning, provision of hospital operational services and finance of the PPP Mater project. Additionally, the Project Deed stipulates the requirements to manage, under the Labour Services Agreement, the clinical staff, the leases and cross leases, novation, certification and other project stipulated agreements.

CONCLUSIONS

The objective of the Mater Hospital Case Study was to establish how 'current industry practice' is utilised by PPP consortiums in the assessment and evaluation of risks during the tender phase of a project. This paper presents the preliminary findings of the broader case study project and focuses on the PPP selection process. The NSW Government assessed procurement alternatives for delivering the new hospital (i.e. traditional public sector delivery or a PPP). Upon determining the procurement method as PPP, a scope was determined and this established a project term of 28 years for the finance, design, construction and commissioning of new hospital buildings, refurbishment of some existing buildings and transferring of mental health services to

the site. Clinical services were to remain the responsibility of NSW Health while non-clinical (building maintenance, grounds, security, cleaning et al) services were to be completed by the private sector. Payments from the NSW Government for services were based on performance benchmarks. Significant assessment was completed for design risk, construction risks, interface risks and hospital disruption, financial risks et al in order to determine the best 'value for money' proposal against risk transfer (using the Public Sector Comparator benchmarking model). Following a rigorous tender period, the private sector consortium bids were evaluated on financial, commercial, technical and services issues, and legal and cost parameters. Final contractual negotiations between the Government and the private sector consortium saw minimal changes to the risk profile to what the Government had previously established. Through the PPP process, NSW Treasury calculated that the Novacare proposal would provide a 'net present cost' saving to the Government of approximately 2% when compared to a traditional public sector delivered procurement model over the contractual PPP term. The next stage of the research is to analyse the data collected during the interview process that focused on identifying the project specific risk factors and how they were successfully managed.

REFERENCES

- Abelson, P (2005) *Outsourcing of Public Services in Australia: Seven Case Studies*, 24/4/11, <http://www.econ.mq.edu.au/research/2005/OutsourcingPublicServices.pdf>
- Akintoye, A., Beck, M. and Hardcastle, C. (2003). *Public-private partnerships: managing risks and opportunities*. Blackwell Science: Oxford ; Malden, MA.
- Allen, G. (2001). The Private Finance Initiative (PFI). Research Paper 01/117, Economic Policy and Statistics Section, House of Commons Library: London
- Australian Procurement and Construction Council (2002). *Discussion Paper: Key Issues in Procurement through Public Private Partnerships (PPPs)*. Australian Procurement and Construction Council Inc.: Canberra.
- Blake, N. (2004). Pros and cons of Public Private, Australian Nursing Journal. 11(8), 15.
- Chung, D (2008) *Public Private Partnerships: A Procurement Device to Manage Public Sector Debt*, 20/4/11, <http://www.irspm2008.bus.qut.edu.au/papers/documents/pdf>
- Commonwealth of Australia (2002). *Public Private Partnerships: An Introduction*. Department of the Parliamentary Library: Canberra.
- De Lemos, T., Betts, M., Eaton, D. and de Almeida, L. T. (2003). The nature of PFI, *Journal of Structured and Project Finance*. 9(1), 59.
- DOTARS (2002). Transport Programmes - Public Private Partnerships. 1/10/11, http://www.dotars.gov.au/transprog/govt_links/ppp.htm
- Dowdeswell, B. and Heasman, M. (2004). *Public Private Partnerships in Health: A comparative study*. 8/10/11, <http://www.bouwcollege.nl/pdf/english-568.pdf>
- English, L. M (2004) *Using PPP to deliver social infrastructure: Health care delivery in Victoria*, Conference Paper, Fourth Asia Pacific Interdisciplinary Research in Accounting Conference, Singapore
- English, L. M. and Guthrie, J. (2003) *Driving privately financed projects in Australia: what makes them tick?* Accounting, Auditing & Accountability Journal. 16(3), 493-511.
- Fitzgerald, P. (2004) *Review of Partnerships Victoria Provided Infrastructure*. Growth Solutions Group: Melbourne.

- Hodge, G & Greve, C (2005) *The challenge of public-private partnerships: learning from international experience*, Edward Elgar Publishing, Cheltenham.
- Hunter Health (2002) *Mater Hospital Redevelopment Project Definition Plan*, NSW Government: Sydney.
- Hunter New England Area Health Service (2009), *Calvary Mater Newcastle*, 29/9/11, http://www.hnehealth.nsw.gov.au/services_and_facilities/newcastle_mater_misericordiae_hospital
- Infrastructure Partnerships Australia (2009) *Case Study – Mater Hospital Redevelopment*, 15/9/11, <http://www.infrastructure.org.au/Content/MaterHospitalRedevelopment.aspx>
- Jefferies, M., McGeorge, D. And Chen S.E. (2007) *Risk Management In Public-Private Partnerships: Emerging Issues In Social Infrastructure. Building Across Borders*, CIBW92 Procurement Systems, Hunter Valley, Australia, Sept 23-26, pp232-239.
- Jefferies, M. and McGeorge, D. (2008) Public-Private Partnerships: A Critical Review of Risk Management in Australian Social Infrastructure Projects. *Journal of Construction Procurement*, 14, (1), pp66-80, ISSN 1358-9180.
- Jefferies, M. and McGeorge, W.D. (2009) Using Public-Private Partnerships (PPPs) to procure Social Infrastructure in Australia. *Engineering, Construction and Architectural Management*. 16, (5), pp 415-37, ISSN 0969-9988.
- Lend Lease (2002), *Development Application Mater Misericordiae Hospital*
- McCann FitzGerald (2000). *McCann FitzGerald - Legal Briefing: Public Private Partnerships*. 15/9/11, http://www.mccannfitzgerald.ie/legal_briefing/ppp
- Novacare Consortium (2010) *Newcastle Mater Hospital Redevelopment*, 21/5/11, http://www.novacareconsortium.com.au/NC_Mater_Hosp_Redevel.htm
- NSW Health (2004) *Newcastle Mater Hospital PPP Project: Request for Detailed Proposals* New South Wales Printer, Volume 1
- New South Wales Health (2005) *Newcastle Mater Hospital Project Public Private Partnership – Summary of Contracts*, NSW Government, Sydney.
- NSW Government (2000), *Working with Government: Private Financing of Infrastructure and Certain Government Services in NSW*. NSW Government: Sydney.
- NSW Treasury (2002). *Private provision of public infrastructure and services*. NSW Treasury: Sydney, NSW.
- NSW Treasury (2009), *NSW Public Private Partnership Policy – an Evolution*, 29/11/12, NSW Treasury: Sydney, NSW.
- Tillman, R. (1997). Shadow tolls and public-private partnerships for transportation projects, *Journal of Project Finance*, 3(2), 30.
- Victoria Government (2010), *Partnerships Victoria*. Department of Treasury & Finance.
- Waal, A.D. (2007). *Strategic Performance management*. New York, Palgrave Macmillan
- Walker, D. H. T. and Hampson, K. (2003) *Procurement strategies: a relationship-based approach*. Blackwell Science, Malden, Mass.
- Watson, D. (2003) The rise and rise of public private partnerships: challenges for public accountability, *Australian Accounting Review*, 13(3), 2.
- Yin, R. K. (2003) *Case study research: design and methods* (3rd ed.). Sage Publications: Thousand Oaks, California, USA.