## Public Private Partnerships in Australia and Japan

**Facilitating Private Sector Participation** 

## August 2010

**Japan External Trade Organization (JETRO)** 

Asia and Oceania Division, Overseas Research Department

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### Glossary

Y Yen (where converted into A\$ assumed rate is A\$1:Y82.3)
A\$ Australian Dollars (where converted into Australian Dollars

assumed rate is Y82.3:A\$1AUD)

AJBCC Australian-Japan Business Co-Operation Committee

BOO Build-Own-Operate
BOT Build-Operate-Transfer
BTO Build-Transfer-Operate

Cabinet Office Cabinet Office, Government of Japan

COAG Council of Australian Governments (A peak intergovernmental

forum in Australia. COAG comprises the Prime Minister, State Premiers, Territory Chief Ministers and the President of the

**Australian Local Government Association)** 

Cth Commonwealth of Australia
DBFO Design Build Finance Operate

DBO Design Build Operate EOI Expression of Interest

**EPA Economic Partnership Agreement** 

FM Facility Management
GFC Global Financial Crisis
IA Infrastructure Australia

JETRO Japan External Trade Organization
J-REIT Japanese Real Estate Investment Trust

MLIT Minister for Land Infrastructure and Transport

NSW New South Wales

PFI Private Finance Initiative

PPA Laws Public Property Administration Laws

PPP Public Private Partnership
RFP Request for Proposals
RO Rehabilitate Operate

RTO Rehabilitate Transfer Operate
SPC Special Purpose Company
SPV Special Purpose Vehicle

Superannuation Australian equivalent to a "Pension fund"

fund

VfM Value for Money

## Introduction

The Japan External Trade Organization (JETRO) has been working to facilitate economic activity between Australia and Japan in the area of infrastructure, particularly in the use of Public Private Partnerships (PPPs). Ernst and Young were engaged to prepare this research report to review the opportunities and issues for foreign participation in the PPP markets of Australia and Japan.

## Report Structure

- 1. Executive Summary
- 2. Global PPP Overview
- 3. Overview of the Australian PPP market
- 4. Analysis of the Australian PPP market
- **5. Overview of the Japanese PPP market**
- 6. Analysis of the Japanese PFI market

#### PPP/PFI

One important distinction within the report is the use of the term "PFI" versus the term "PPP".

For the purpose of this report Private Finance Initiative (PFI) is used in the Japanese context and PPP in the Australian context, according to the evolution of each market respectively. However, it is evident through the history of private sector delivery in Japan that the term PFI has been used to cover services provided without private sector sourced finance.

## 1. Executive Summary

#### Infrastructure need and the role of the private sector to deliver

Infrastructure investment is now a priority for every government across the globe. The demand for investment in quality social and economic infrastructure is likely to significantly outweigh the fiscal resources of governments. The question is: how best can governments bridge this funding gap, meet quality improvements demanded by the public and encourage private sector involvement? The need to meet this funding gap and the increased focus on service delivery has provided the catalyst for the development and implementation of PPPs across the world.

It is in this context, that PPPs are becoming a growing element of public sector procurement in Japan and Australia and as a result both countries are examining ways in which they can facilitate greater private sector participation in the delivery of infrastructure.

#### **Current PPP/PFI activity in Australia and Japan**

To date, Australia and Japan have relatively active PPP markets; both countries have a growing infrastructure need which would suggest that this market segment is set to grow considerably in the years ahead. However, the approach that each country has taken to develop its PPP market has been quite different and as a result there are a number of unique key challenges facing the increased use of private sector participation in the PPP market opportunities in each country.

The use of PPP in Australia has evolved considerably since its early use in the 1980's; and it is now used to deliver infrastructure services across a very wide range of sectors of economic infrastructure (roads, rail, airports etc) and social infrastructure (schools, hospitals and prisons). In contrast, the use of PFI in Japan has been quite restricted in its use to government buildings, schools, hospitals and recreational facilities. In fact, current law in Japan prohibits the use of PFI in certain sectors such as economic infrastructure (road, rail, ports etc).

The form of delivery model is also quite different in each country. In Australia the design, build, finance and operate (DBFO) model is most commonly used where the private sector is responsible for the design, build, finance and operation of the infrastructure facility over a 25 to 30 year term and as a result is required to take a whole of life approach to service delivery. In Japanese PFI projects the build transfer operate (BTO) model is typically used where the role of the private sector is generally restricted to the building and financing of an infrastructure asset which is subsequently transferred to government for operation upon the completion of construction. This approach therefore reduces the private sector's ability to take a whole of life approach to service delivery and erodes the potential for a Value for Money (VfM) outcome when compared to conventional project delivery.

## 2. Global PPP Overview

Across the world, economic and population growth is increasing the stress on already overburdened infrastructure systems and increasing the need for capital to finance infrastructure construction and modernisation. Governments in both Australia and Japan are facing these challenges too and like the rest of the world are facing a growing gap between the capital required for infrastructure development and improvement and the public funding available. In order to bridge this gap between the cost of infrastructure needed and resources available, infrastructure needs to be delivered as efficiently and cost-effectively as possible.

#### What are Public Private Partnerships (PPP)?

PPP is a concept which involves the public and private sectors working in co-operation and partnership to provide infrastructure and services. It is one of a range of alternative structures that fall between conventional procurement through state ownership at one end of the continuum and full privatisation at the other. Instead of the public sector procuring a capital asset by paying for it in full up front, the effect of a typical PPP structure is usually to create a single standalone business, financed and operated by the private sector. The purpose is to create the asset and then deliver a service to the public sector client, in return for payment commensurate with the service levels provided.

#### The key characteristics of a successful PPP program include the following:

- A major capital investment program, requiring effective management of risks associated with construction and delivery
- ► The private sector has the expertise to deliver and there is a sound basis to assume it will offer VfM (Value for Money) .
- ► The structure of the service is appropriate, allowing the public sector to define its needs as service outputs that can be adequately contracted for in a way that ensures effective, equitable and accountable delivery of public services into the long term, and where risk allocation between the public and private sectors can be clearly made and enforced
- ► The nature of the assets and services identified as part of the project are capable of being costed on a "whole of life" long term basis
- ► The value of the project is sufficiently large to ensure that procurement costs are not disproportionate

What benefits does PPP deliver?

Internationally, a number of benefits have been associated with the use of PPP:

## Evidence of VfM (Value for Money)

PPP projects can often deliver greater VfM (Value for Money) compared to an equivalent asset procured conventionally:

Synergies from combining design, construction and operation: While there may be an additional financing cost for the use of private sector funding, this will in many cases be offset by the synergies gained from combining design, construction and operation. This should contribute to a reduction in operating costs, an enhanced level of service, and the benefit gained from the transfer of risk to the private sector. Private finance and operation will usually avoid the cost and timetable slippages that have been common under traditional public procurement. This approach encourages bidders to focus on the whole life costs of the asset over the project lifecycle, as those responsible for the building of an asset are also responsible for long term maintenance and operation

#### Strengthening of infrastructure

The aspects of PPP that encourage innovation and efficiency can also enhance the quality and quantity of basic infrastructure such as water, wastewater, energy supply, telecommunications and transport. They can also be widely applied to other public services such as hospitals, schools, government accommodation/real estate, defence and prisons.

#### New facilities provided efficiently and effectively

Because the private sector usually will not receive any payment until the facility is available for use, the PPP contract structure fosters the use of construction and procurement methods that encourage efficient completion and minimise the risk of defects. The private and public sectors will have to work together to overcome potential problems such as capacity constraints or backlogs that would otherwise undermine service provision.

#### Innovation and spread of best practice

The expertise and experience of the private sector encourages innovation, resulting in reduced costs, shorter delivery times and improvement in the functional design, construction and facility management processes. Developments in these processes can be applied to future projects, facilitating the spread of best practice within public services.

#### Standards maintained

Assets and services will be maintained at a pre-determined standard over the full length of the concession. The public sector client will only pay in full for the service when it is delivered to the required standard. This may contrast with conventional public procurement where maintenance of assets and service quality are dependent on the public sector continuously making funds available to maintain the asset and service.

#### **Flexibility**

PPPs have the inbuilt flexibility to be introduced successfully to most types of infrastructure, and the principles that underpin PPP can be adapted to many situations.

#### What are the prerequisites of a successful PPP program?

International best practice has highlighted a number of prerequisites to a successful PPP program. The key ones include:

#### Political commitment

Political commitment at the policy level is important for the private sector, because unless PPP is seen to offer continuing business opportunities, firms will be reluctant to develop the necessary resources that are required to bid for contracts.

#### Enabling legislation

PPP projects often need to be supported by enabling legislation that is firmly embedded in the legal structure of the host country. Key aspects of this include:

- ▶ The existence of a concession law that can be readily applied to PPPs
- ► The removal of tax anomalies that can weigh against PPPs

Refining of public expenditure capital controls to accommodate PPPs

#### Expertise

Both the public and private sectors must have the necessary expertise to deal with the PPP process. The public sector procurer, for example, needs to be able to negotiate individual project contracts and to access the appropriate financial, legal and technical expertise.

#### Project prioritisation

The government needs to identify those sectors and projects that should take priority in the PPP process. A gateway review of the commercial deliverability of the scheme, prior to the commencement of the procurement, can be a source of comfort to the private sector. It helps to reduce the incidence of unsuccessful procurements and avoid the associated bidding costs that would otherwise be incurred.

#### Deal flow and standardisation

A regular and predictable flow of deals, based on recognised risk allocation templates, nurtures the development of a successful PPP program. Guidance on contract structure also helps to keep costs down.

What have been the key drivers of VfM(Value for Money) for the public sector?

The benefits of PPP are as much for the public sector as for the private sector. Feedback from *public sector* project managers highlighted what they saw as the key drivers of VfM:

- ▶ Risk transfer: The transfer to the private sector of those risks that it is better able to manage, which includes most risks associated with the design, construction, operation, technological change and finance
- Output-based specification: The requirement that services are specified in terms of payment for a specified output, on which performance can be measured, has been linked to quality and timing of delivery. This contrasts with the conventional approach to public procurement that is based on predetermined funding of inputs
- ► Long term nature of contracts: The time profile of PPP projects provides scope to recover costs of the initial investment, develop alternative approaches to service delivery and focus on costing over the whole life of the project
- Competition: VfM is easier to demonstrate where there has been effective price-led competition

What are the major challenges to overcome in establishing PPP schemes?

The initial challenge for the establishment of PPP schemes is to ensure that the prerequisites for a PPP program have been satisfied. Despite progress made in a number of countries, others may encounter either specific challenges, relating to legal reform, cultural differences and adaption to a more decentralised system, or more fundamental structural difficulties:

#### Legal and cultural differences

Japan, for example, has encountered a challenge in implementing suitable PPP legislation that has included less experienced contractual documents. Having addressed this legal challenge, Japan has also experienced cultural differences arising from PPPs, relating to changes in the roles of public and private sectors and the need to come to terms with new approaches to competition and evaluation.

#### Revising the concession law and legal framework

An adequate concession law needs to be in place. Lenders, for example, were not prepared to commit themselves to projects in Italy until a legal and organisational framework was adopted. Key aspects of this were the introduction of the concession law, as a result of which the Government was accountable for infrastructure projects, and the creation of a taskforce by the Ministry of Finance.

#### Structural challenges

Apart from difficulties posed by legal systems, the development of PPP has been constrained, particularly in some developing and emerging markets, by structural issues related to the ability of political institutions to implement reform, the lack of sophistication of domestic capital markets, and the inability of either users or the government to cover the cost of the new investment.

#### An international experience

Whilst PPP originated in the UK, other countries soon followed, making PPP an established means of providing public services across the world. As each country has developed its own PPP policy and learned from its own experiences (both positive and negative) they have tried to develop the structures they have used and to standardise their approach so as to reduce costs. PPP has been criticised for imposing expensive bidding costs which can discourage private sector participation, thus reducing competition. It is in the public sector interest to remove such barriers to entry so as to create a market opportunity in which more private sector participants have access. Increasing standardisation and educating the public sector in smart procurement has been governments' response to reducing bid costs and therefore encouraging competition.

## 3 Overview of the Australian PPP market

The use of PPP in Australia has evolved considerably since its early use in the 1980's and is now used to deliver services across a very wide range of sectors of economic (roads, rail, airports etc) and social infrastructure (schools, hospitals and prisons etc). The Australian market now has a reputation for a clear and transparent procurement process which is being used to deliver infrastructure projects across a plethora of sectors. The scope of services that the private sector provides is quite broad and as a result there is greater risk transfer through a whole of life approach to project delivery which has resulted in greater opportunities for the PPP model to deliver a VfM outcome when compared to the conventional form of procurement.

The widespread use of PPP across Australia is now being facilitated with a National PPP policy and guidelines developed by Infrastructure Australia on behalf of the Federal Government. This is supported at the State and Territory level by Infrastructure Departments with their own PPP policy and guidelines and dedicated PPP units to oversee delivery of state based infrastructure PPP projects.

The key features of this evolution are such that in Australia there now exists the following:

- ► A legislative framework that permits private sector ownership, management and operation of public infrastructure across a wide range of infrastructure assets
- ► A clear and transparent procurement process for large scale infrastructure projects
- A dedicated Federal Minister for Infrastructure with centrally coordinated set of project and policy guidelines overseen by Infrastructure Australia
- A well supported network of PPP departments and Infrastructure Ministers across the States and Territories with well understood procurement methodology and policy guidance
- A deep market participation by a wide range of foreign and domestic financial investors, contractors, facilities maintenance providers and institutional equity providers
- ► An accounting and tax regime that is well understood and facilitates long term equity investment in infrastructure

Federal, State and Local governments across Australia are facing a significant infrastructure investment estimated to be up to A\$750.0bn over the next 10 years. It is considered very likely that the investment needed to meet this infrastructure requirement will outweigh the combined fiscal resources of governments in Australia. In order to meet this potential funding gap it is likely that governments will increasingly look to a greater level of private sector participation in the delivery of public infrastructure. Not all of this infrastructure investment will be delivered by PPP. But if only 15% were to use the PPP delivery model, this would require a PPP market investment of approximately A\$112bn which is well out of reach of domestic Australian PPP market participants both in terms of human capital skills as well as financial capital. Therefore, in order to deliver this infrastructure investment, the Australian PPP market will depend upon greater involvement from international private sector market participants across the infrastructure transaction lifecycle, from contractors and financiers to operators. This will be especially so as the Australian PPP market continues its evolution into new market sectors such as urban rail and renewables where there will be an increasing reliance on specialist technology and integration solutions that are already resident within international markets.

The key challenges to the Australian PPP market in continuing to attract private sector participation, domestic and international, can be summarised as follows:

- Early and easy accessibility to information on projects for new market entrants to enable them to bid competitively
- ► Ability of new market entrants to form or join consortia to bid for projects
- Development of a sustainable pipeline of market opportunities across a wide range of sectors to enable new entrants to make an informed decision over the scale of the opportunity
- ► To determine the level of investment required to be successful in the market

## 4 Analysis of the Australian PPP market

#### 4.1 Overview

The use of PPP in Australia has evolved considerably since its early use in the 1980's and is now being used to deliver economic infrastructure such as toll roads, with the private sector taking full market risk, and social infrastructure such as hospitals, prisons and schools, which are based principally on payments for availability and performance of services.

The scope of services that the private sector provides is quite broad and as a result there is greater risk transfer through a whole of life approach to project delivery. This approach has resulted in greater opportunities for the PPP model to deliver a VfM (Value for Money) outcome when compared to the conventional form of procurement.

There is now widespread use of PPP across Australia with a National PPP policy and guidelines developed by Infrastructure Australia on behalf of the Federal Government. This is supported at the State and Territory level by Infrastructure Departments with their own PPP policy and guidelines and dedicated units to oversee delivery of state based PPP projects.

Currently, Infrastructure is a priority for every government in Australia. Local, State and Federal governments have forecast their intention to invest more than A\$750bn (Y61.7 trillion) over the next 10 years in projects ranging from schools and hospitals to telecommunications, roads, railways and airports.

It is considered very likely that the investment needed to meet this infrastructure requirement will outweigh the combined fiscal resources of governments in Australia. In order to meet this potential funding gap it is likely that all levels of government will increasingly look to a greater level of private sector participation in the delivery of public infrastructure. Not all of this infrastructure investment will be delivered by PPP, but if only 15% were to use the PPP delivery model, this would require a PPP market investment of around \$112bn (Y9.2 trillion) which is well out of reach of the domestic Australian PPP market participants both in terms of human capital skills and financial capital.

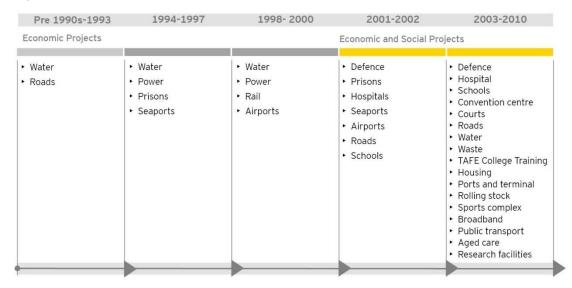
Therefore, in order to deliver this infrastructure investment, the Australian PPP market will depend upon greater involvement from international private sector market participants across the infrastructure transaction lifecycle, from contractors and financiers to operators. This will be especially so as the Australian PPP market continues its evolution into new market sectors such as urban rail and renewables where there will be an increasing reliance on specialist technology and integration solutions that are already resident within international markets.

#### 4.2 Legislation, Policies and Procedures

The private sector in Australian infrastructure has been involved for more than 20 years, taking its inception from early projects in the 1980's such as the Sydney Harbour Tunnel. The development of PPPs in Australia followed a number of legislative changes throughout the 1990's and the policy context was largely initiated by the Victorian market in the form of Partnerships Victoria.

The legislative regimes in Australia prior to the 1990's did not facilitate the utilisation of the private sector or the PPP approach across a full range of services. The government was constrained by specific legislation which operated to prevent private involvement in certain projects.

Diagram 1: Evolution of the Australian PPP market



As a result of deregulation and a move towards increased privatisation, Australia implemented a number of laws throughout the 1990's and beyond, allowing greater private sector participation. Examples included the Airports Act 1996 (Cth), Roads Act 1993 (NSW), National Rail Corporation Act 1992 (Cth) and the Telecommunications Act 1997 (Cth).

These Acts allowed much greater flexibility around ownership, leasing terms and provisions of services to the Government facilitating the inclusion of the private sector in public infrastructure and services.

A more formal approach to PPP by government began in Victoria with the introduction of the Partnerships Victoria policy framework in 2000. The policy aimed to provide for a whole-of-government approach to the provision of public infrastructure and related ancillary services through PPPs.

This extended through the majority of State jurisdictions with the recognition of the value of PPPs in delivering efficiencies as highlighted in the Allen Consulting Group report<sup>1</sup>, including the benefits of:

- PPPs demonstrating superior cost efficiency from contractual commitment to final outcome
- ► Cost overruns are lower under PPPs (statistically close to zero) when compared to traditional procurement
- ▶ PPP imparts a rigorous level of risk analysis in project development
- ► There is likely to be a beneficial effect of coupling of management, construction and ongoing services that is unmeasured
- ▶ Maximising the use of private sector innovation and asset utilisation skills

The value of PPPs recognised, PPP policies or frameworks now span across nearly all Australian States and Territories eventually leading to the Council of Australian Governments (COAG) agreeing to the introduction of Infrastructure Australia in 2008.

In Australia the Federal market is represented by a National Minister for Infrastructure supported by a Coordinator General, a model which has now been replicated across the majority of the State Jurisdictions. The majority of States now have infrastructure policies, priorities and procedures administered by a dedicated Infrastructure Minister and supported by the Coordinator General acting as a central point of contact.

<sup>&</sup>lt;sup>1</sup> Performance of PPPs and Traditional Procurement in Australia, The Allen Consulting Group, 2007

## 4.3 Federal based policy development and project delivery

#### 4.3.1 Infrastructure Australia

Infrastructure Australia (IA) is an independent statutory advisory council whose main function is to advise the Commonwealth, State, Territory and Local Governments, investors and owners of infrastructure about national infrastructure priorities, policy and regulation reforms.

It is responsible for the allocation of federal infrastructure funding to national priority projects and undertakes a rigorous assessment process for selection and delivery of projects.

#### 4.3.1.1 National PPP Policy and Guidelines

In 2008 the Council of Australian Governments (COAG) endorsed the National Public Private Partnership Policy and Guidelines. All Australian, State and Territory Government agencies now apply the National Public Private Partnership Policy and Guidelines ("National PPP Policy and Guidelines"), replacing previously existing policy and guidelines in those jurisdictions. However, it should be noted that in many areas the National PPP Policy and Guidelines are broad enough to allow pre-existing differences in the practices of the States and Territories to be maintained.

Further to this the National PPP Policy and Guidelines state that "application of the Guidelines to the provision of infrastructure shall be determined by individual jurisdictions", and that in "some areas" they retain flexibility to "apply their own requirements and principles". In cases where it may be appropriate to depart from the processes set out in the National PPP Guidelines, approval from the relevant PPP authority (usually Treasury or Finance) must first be obtained.

As a result of the National guidelines, the various State governments have implemented a mandatory procurement options analysis for projects with a capital cost over A\$50mn (Y4.1bn) to determine whether PPP is the most viable delivery method for a project. This process will assess PPP delivery outcomes on a VfM basis, determining whether the private sector can add VfM across six key drivers:

- ▶ Sufficient scale and long term nature major capital investment with long term requirements
- Complex risk profile and opportunity for risk transfer
- ▶ Whole of life costing
- Innovation (can competitive tension develop innovative solution to meet output specifications)
- Asset utilisation (can costs be reduced through third party utilisation or efficient design)
- ▶ Better integration of design, construction and operational requirements

### 4.3.2 State based policy development and project delivery

The introduction of the IA guidelines has brought a commonality across policies and guidelines. However, there is still State based development of projects and individual policies.

One of the key features of the Australian PPP market is the knowledge and skill base across each of the States to be able to effectively engage with the private sector and develop and support agencies in their procurement of infrastructure through PPP. The majority of the States have a PPP department that facilitates private sector participation, brings projects to market and acts as an intermediary between the procuring agency and the relevant approving minister.

#### 4.3.2.1 State based infrastructure priorities

At the agency level, each Australian State has its own infrastructure priorities and hence reference to each of the States' infrastructure plans should be examined in the context of PPP scope and restrictions.

The States generally develop plans focussing on local priorities across the full spectrum of PPP sectors. Recently this has ranged from hospitals and schools to water, road and rail infrastructure.

### 4.4 Project Type, Size and Scope of Services

In the Australian context, the evolution of the PPP market has expanded across a number of sectors. Projects have been delivered across a wide range of capital values ranging from A\$50mn for small social infrastructure projects up to A\$4bn for large scale economic infrastructure projects such as toll roads and water projects.

The scope of services has also gradually evolved over time and in Australia the private sector has participated in the delivery of a full range of public services across economic and social infrastructure where:

- social infrastructure projects are based on the provision of core service/accommodation type projects where the government payment is based upon availability of the asset and services
- economic infrastructure projects are based on their economic viability, where the private sector takes patronage or demand risk (e.g. toll roads)

This continued evolution of the use of the PPP model across a wide range of market sectors is a direct result of increased confidence by the public sector that the private sector has the capability to meet the service requirements of government over the long term and to deliver a VfM outcome when compared with conventional methods of procurement. Not only has the private sector extended its operations into new market sectors but also over time the scope of services delivered by the private sector has increased from non-core services such as cleaning, laundry and catering to elements of core-services such as custodial and clinical services on certain projects.

#### 4.5 Structure of PPP models

In Australia the DBFO(Design Build Finance Operate) model is most commonly used where the private sector is responsible for the design, build, finance and operation of the infrastructure facility over a 25 to 30 year term and as a result is required to take a whole of life approach to service delivery.

The delivery structure is normally driven by the DBFO model and consequently the delivery vehicle used for the procurement of the infrastructure or related services typically takes the following form:

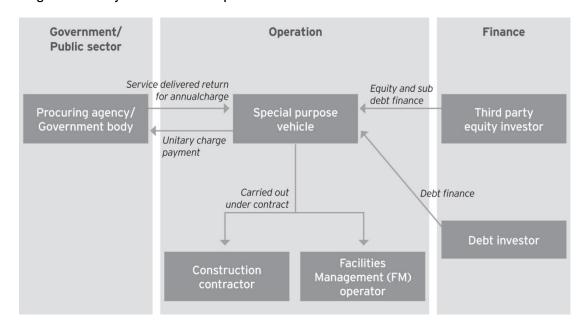


Diagram 2: Delivery vehicle used for the procurement of the infrastructure or related services

The public sector contracts with the Special Purpose Vehicle (SPV), which in turn procures the building of the relevant asset or facilities and the subsequent services (operations) from specialist contractors. The performance risk is passed to the party providing the services, in this case the sub-contractors to the SPV. Equity is normally provided by a third party investor or in some cases the specialist contractor. Debt is then raised through the security of the SPV's payment from the procuring agency.

## 4.6 Private Sector Market Participants

As a result of the significant improvement that have been made to the efficiency of the PPP procurement process by government combined with a steady flow of projects has seen significant interest in the Australian PPP market from both domestic and international private sector participants. The commonality approach that Federal and State governments now take nationally to PPPs means that the private sector can now make investment decisions on a national basis as opposed to the previous State by State approach. This has significantly improved the overall efficiency of the private sector's approach to the Australian PPP market.

Given the varying type, size and scope of services of projects within the Australian PPP market, the private sector market participants are equally varied and each have a very important role to play in ensuring that they combine with other private sector participants in bidding consortia to deliver the outputs that their public sector clients are seeking to the required level of quality and price. In order to maintain their competitiveness, private sector market participants in the Australian PPP market have become very sophisticated and have begun investing in their teams with additional skills demanded by the PPP market and by complementing these inhouse skills through the formation of strategic alliances with other private sector contractors. As a result, we are now seeing some Consortia beginning to take a sector approach to the PPP market and form dedicated teams in certain markets such as health or roads.

The formation of the typically bidding consortium is largely influenced by their requirement to convince government that they have the necessary skills for the following key attributes of a PPP project:

- ► To raise finance required to fund the infrastructure
- ► To construct the required infrastructure
- ► To operate or provide a service for the concession length to the required standard

As a result of the varying size and complexity of projects, a two tier market has evolved in Australia where for large projects typically greater than A\$1bn the size of the project means that the ability of the domestic market to form a number of consortia is reduced, typically with only two or three created. Therefore, competition is reduced. However, in recent large transport projects, especially urban rail such as the Sydney Metro and Gold Coast Rapid Transit, where there has been a need for overseas operator experience, there has been an increase in the number of bidding consortia to 5 or 6. For projects with a capital value of less than A\$1bn (Y82.3bn) there is sufficient capacity within the domestic bidding market to support 5 or 6 bidding consortia.

Consequently, consortia formed in Australia typically consist of:

- An equity investor
- ► A construction company with demonstrated experience in PPP and the sector of the project being delivered
- A facilities management company (hard FM/soft FM)
- ► Specialist technical skills or access to technology (when required e.g. light rail, desalination etc)

The breadth of skills required in consortia to adequately meet the service output specifications is evident in the recent consortium participants for the Gold Coast Rapid Transport (Qld - rail) project, demonstrated in the table below:

The bidding market is experienced and comprises a range of financial sponsors, construction companies, facilities managers, debt participants and passive equity investors.

Diagram 3: Consortium participants registering for Gold Coast Rapid Transit Rail project

Consortium	Consortium Members	Role
gcSMaRTmove	AnsaldoSTS	<ul><li>Systems integration</li></ul>
	<ul><li>SMRT International</li></ul>	<ul><li>Transport operations</li></ul>
	► Thiess	<ul> <li>Construction company</li> </ul>
	▶ Mitsui	<ul> <li>Rolling stock provider/Supply Chain</li> </ul>
	<ul><li>Royal Bank of Canada</li></ul>	► Finance
MoveGC	<ul><li>Veolia Transport</li></ul>	<ul><li>Transport operations</li></ul>
	▶ Alstom	<ul><li>Rolling stock provider</li></ul>
	<ul><li>Leighton Contractors</li></ul>	<ul> <li>Construction company</li> </ul>
	Macquarie	► Finance
GC Connect	► MTR	► Transport operations
	John Holland	<ul> <li>Construction company</li> </ul>
	► ITOCHU	<ul><li>Systems integration</li></ul>
	<ul><li>Royal Bank of Scotland</li></ul>	► Finance
GoldinQ	► Keolis	► Transport operations
-	▶ DownerEDI	▶ Engineering
	Bombardier	<ul> <li>Rolling stock provider</li> </ul>
	<ul><li>McConnell Dowell</li></ul>	<ul> <li>Construction company</li> </ul>
	<ul><li>Plenary</li></ul>	► Finance
KirraLink	▶ TransdevTSL	► Transport operations
	Acciona	▶ Engineering
	► CAF	<ul><li>Rolling stock provider</li></ul>
	<ul><li>Mitsubishi</li></ul>	<ul><li>Supply Chain/machinery provider</li></ul>
	<ul><li>Seymour Whyte</li></ul>	<ul> <li>Construction company</li> </ul>
	Capella	► Finance
SNCLavalin	▶ SNCLavalin	► Engineering
	▶ BMD	<ul> <li>Construction company</li> </ul>
	► Thales	<ul> <li>Security/computer systems</li> </ul>
	<ul><li>Verkehrs</li></ul>	<ul><li>Transport operations</li></ul>
	<ul><li>Ernst and Young</li></ul>	► Finance

## 4.6.1.1 Involvement of foreign entities

There are no legal restrictions on foreign players in bidding for Australian projects. International participants are active in the Australian market and this is supported by the consortia that have formed on the recent Gold Coast Rapid Transit project. Foreign participants find the market has sound fundamentals through a standardised procurement framework, and there is certainty of delivery through PPPs due to the procurement options analysis.

To date, the majority of projects have been delivered by domestic market participants. However, we are now witnessing increased market participation by overseas players from Europe and Japan, and with the growing demand for infrastructure projects, this level of overseas participation is set to continue to increase. The role of ITOCHU in the Victorian Desalination PPP project should provide comfort to other Japanese contractors that the Australian PPP market is an open one.

### 4.7 Financing

Given the fact that the majority of PPPs have a government party as the client the project counterparty risk for PPPs is considered very low and when combined with the robust contractual framework and supporting legislation in place for PPP projects in Australia has meant that there has been significant interest from financiers across the whole spectrum of funding products from equity, subordinated debt, senior bank debt and bonds both domestically and internationally.

Like any other financial market, in the wake of the Global Financial Crisis (GFC) there has been some pressure on the availability, pricing and tenor of funding for PPP projects but transactions still continue to be made. There are signs that the market is returning to a new level of sustainable interest in funding PPP projects. It is unclear yet whether that will ever reach the same levels as before the GFC.

The typical structure of Australia's PPP market project finance consists of debt or bond financing in the range of 75-90% of total project cost and equity investment of 10-25%. The structures driven by sector type with social infrastructure projects more highly geared than economic infrastructure projects, reflecting the additional risk associated with patronage or demand forecasting.

## 4.7.1 Equity (Investors)

Historically, Infrastructure has been a very well understood and highly regarded asset class in Australia and as such there is a significant and varied pool of equity investors ranging from contracting companies to financial institutions. Australian equity investment is typically drawn from the following sources: investment banks, specialist investors, superannuation funds and/or contractors. There has also been direct investment by specialist infrastructure funds which are either listed or unlisted.

#### 4.7.2 Debt

As noted above there has historically been a very strong interest from both domestic and international banks in the Australian PPP market. Prior to the GFC there was significant competition to fund projects and as a result the project sponsors for PPP projects had the benefit of a very liquid banking market with banks offering long tenors and competitive margins depending on the nature of the project. Clearly, after the GFC, the availability of bank debt has reduced and both pricing and tenor of debt that is on offer has retreated considerably. The bank debt market does continue to be available to PPP project sponsors and there are increasing signs that the market will return to a sustainable level of activity.

## 4.7.3 Bond financing

Prior to the GFC, the Australian PPP market also benefitted from a very deep and competitive bond financing market. In many instances Australia led the world in the development of this financing product to deliver PPP project financings where the use of bonds was very competitive to bank debt. Following the GFC, many of the mono-line insurers who were integral to the use of bond financing in Australia are no longer in the market. As a result, there is currently limited availability of bond financing for PPP projects. Whilst it is expected that bond

financing might return it is not clear when and therefore until then projects will continue to be financed through use of senior bank debt facilities.

#### 4.7.4 Institutional investment

The legislative structure in Australia places a mandatory requirement on companies to pay individual superannuation (also known as pension fund). The current compulsory contribution is 9% per annum as a basis of employee gross salary. As a result one of the largest sources of institutional investment in Australia is from superannuation (pension) funds.

As at 30 September 2009, the Australian Prudential Regulation Authority reported that the total estimated assets in superannuation was over A\$1.2 trillion (Y98.7 trillion). Infrastructure investment funds normally have a specified allocation to infrastructure assets and this represents a large and growing source of equity funding for PPP projects and the broader infrastructure sector.

A number of Australian superannuation (pension) funds have an established investment history in infrastructure in Australia and overseas. Several funds, including Industry Funds Management, Victorian Funds Management Corporation, UniSuper, the Motor Traders Association of Australia, Hastings Funds Management and AMP are infrastructure investors and all have dedicated infrastructure teams looking globally for projects to invest in.

This role for superannuation funds as infrastructure investors has increased as the industry has matured. In 2002, listed and unlisted infrastructure constituted on average only 2% of the total superannuation fund investment, though was forecast to rise to 5% by 2012. However, in 2008, four years earlier than forecast, the average infrastructure investment reached 5% and exceeded 6% in 2009.

### 4.8 Taxation Systems

The taxation regime in relation to Australian PPP projects is well understood and does not act as a deterrent to investment by the private sector in infrastructure projects.

This was not always the case, and in the past there were a number of unintended consequences of the tax legislation of the time which meant that there was significant uncertainty over the tax treatment for investments in infrastructure. The level of operational and/or demand risk taken by the consortium project vehicle would generally depend on the type of economic or social infrastructure involved. In general, social infrastructure PPP arrangements are those which in the past have been at more risk of triggering an unfavourable tax treatment. This meant that tax risk in relation to the structuring of such PPP arrangements and Tax structuring efforts were required to ensure that a section of legislation (s.51AD, 1936 Income Tax Assessment Act) did not apply to PPP transactions as it reduced effective return.

Following a review of the taxation system, the Federal Government took decisive action to overcome this anomaly in Taxation legislation and amended the legislation with the replacement of s.51AD by Division 250 in 2007. This has now resulted in a tax environment that is much more supportive for investment in PPP projects in Australia.

#### 4.9 Opportunities for private sector participation in the Australian PPP market

#### 4.9.1 Market opportunities

Federal, State and Local governments across Australia are facing a significant infrastructure investment needs which are estimated to be up to A\$750bn (Y61.7 trillion) over the next 10 years. It is considered very likely that the level of financial investment needed to meet this infrastructure requirement will outweigh the combined fiscal resources of governments in Australia.

In order to meet this potential funding gap it is likely that the various Federal and State governments will increasingly look to a greater level of private sector participation in the delivery of public infrastructure. Not all of this infrastructure investment will be delivered by PPP. But if only 15% were to use the PPP delivery model, this would require a PPP market investment in the vicinity of \$112bn which is well out of reach of domestic Australian PPP market participants both in terms of human capital skills as well as financial capital.

This will mean that in order to deliver this infrastructure investment the Australian PPP market will require greater involvement from international private sector market participants across the infrastructure transaction lifecycle, from contractors and financiers to operators. This will be especially so as the Australian PPP market continues its evolution into new market sectors such as urban rail and renewables where there will be an increasing reliance on specialist technology and integration solutions that are already resident within international markets.

In particular the Australian market will have a large demand for:

- ► Specialist technology as it moves to more complex projects and develops new sectors (e.g. urban rail and the Solar Flagships Program)
- Access to capital to fund large scale projects exceeding A\$1bn

This creates opportunities for Japanese companies (and other foreign industry players) to enter the Australian market and help meet the capacity constraints of skills shortages, technical solutions and financing capital.

There is already evidence of greater participation of Japanese and other foreign companies participating in the Australian market in projects such as the Victoria Desalinisation project and Gold Coast Rapid Transit.

### 4.10 Issues for private sector participation in the Australian PPP market

## 4.10.1 Accessing information

In Australia there is a need to be involved in projects as early as possible. The bidding market has developed into a small number of sophisticated players who have evolved quickly to participate in the Australian market. These bidders bid on projects on a portfolio basis across a number of sectors and quickly form consortia to capture the best technical and operational skills in the market to gain the greatest competitive advantage.

Consortia often form prior to the Expression of Interest (EOI) stage on the basis of market knowledge of a project's inception or from their understanding of the project through market sounding exercises carried out by the procuring agency.

Foreign companies need to be more aware of opportunities as early as the pre-feasibility stage and will need to track the procuring agency to understand issues and place themselves competitively for the EOI (Expression of Interest) stage.

#### 4.10.2 Access to domestic market participants

Due to the wide scope of projects and the need for specialist skills to deliver them, in the Australian context, bidding consortia often consist of a small group of companies capable of meeting the evaluation criteria. This can create an impediment to foreign companies as they need to gain the knowledge and experience necessary to bid competitively.

As a result, foreign entities need to either develop a "value proposition" to clearly understand and demonstrate to potential partners their capabilities that will enhance the competiveness of the consortium's final bid. This will require the foreign company to demonstrate their value proposition in one of two areas:

- ► Technical capabilities (particularly in technology)
- Access to capital (equity or debt)

Achieving and demonstrating this capability requires investment on the ground in Australia to develop local market knowledge and relationships.

### 4.10.3 Market opportunities

To maximise international private sector commitment and consequently investment to the Australian PPP market, Australia must distinguish itself from other global markets by making its infrastructure market attractive to foreign participants. Foreign entities (contractors, operators, financiers) will not commit to a market unless there is evidence of a pipeline of projects across a variety of sectors and project size supported by a record of delivery.

Following the recent increased standardisation of PPP Policy and Guidelines across Australia and supporting legislation through contractual and taxation frameworks which combined with an increasing demand for infrastructure does mean that Australia possesses many of the key attributes of an attractive investment opportunity for Japanese private sector participants.

#### **4.10.4** Bid Costs

A tender process in Australia can run anywhere from 12 to 18 months and involves fully underwritten proposals. The combination of time, procedural effort and due diligence can result in a high level (often into millions of dollars) that bidders will place at risk until selected as the preferred proponent.

This acts as a major barrier to entry for foreign and domestic participants, particularly in relation to large-complex economic infrastructure projects that come to market.

It is hoped that the increased drive toward standardisation of the National PPP Policy in Australia should assist in mitigating the negative impact that the increasing burden of bid costs will have on competition in the Australian PPP market from both domestic and international participants. This is an issue that both Federal and State governments in Australia are aware of and are seeking to address.

## 5 Overview of the Japanese PFI market

In 1999, Japan enacted a PFI Promotion Law that introduced a variation of the UK's PFI model to the Japanese infrastructure market. The Japanese market is characterised by smaller projects (Y5bn-Y30bn/A\$61mn-A\$365mn) primarily across the social infrastructure sector (e.g. government buildings, schools and hospitals) that have been delivered mainly on a BTO basis. The Japanese model limits the degree of risk transfer and as such means that the scope of services for private sector participants is limited to construction and finance. Whilst this relatively simple approach helps to expedite delivery of infrastructure projects, it does mean that both domestic and international investors and operators have limited interest in bidding into the Japanese PFI market in its current form. It also means that the Japanese public sector is not gaining access to the key benefits of risk transfer, improved quality of services and VfM outcomes that properly structured PFI projects can deliver. In order to obtain these benefits and to attract greater interest and investment in the PFI infrastructure market, Japan will need to take a more sophisticated approach to contract issues such as risk transfer, whole of life costing and incentive mechanisms.

#### The key features of the Japanese PFI market can be summarised as follows:

- ► Limited national co-ordination and facilitation of PFI delivery within Japanese public sector bodies; no public sector championing for the use of PFI
- ► A market dominated with a large number of small capital value projects
- ► the majority of projects are tendered on a BTO basis with a very limited scope of services that is largely inputs based and does not extend beyond the construction phase
- ► Projects have a very local market focus and are generally procured directly at the Prefectural government level
- Declining domestic market interest in PFI projects as a result of the small capital value, limited scope of services and locally based tender process
- No awareness or participation from international market participants in Japanese PFI projects
- ► Legislative provisions that restrict private sector participation in some of the major economic infrastructure sectors such as rail, roads and ports
- ▶ A lack of awareness and participation from institutional equity investors in PFI projects
- ► An accounting and tax structure that does not facilitate long term institutional equity investment in projects

The key challenges to the Japanese PFI market to facilitate private sector participation, domestic and international, can be summarised as follows:

- Further develop PFI project delivery expertise and support within the public sector agencies responsible for the delivery of infrastructure at the National, Prefectural and Local government level
- ► Simplify and standardise the PFI procurement and bidding process and procedures across National, Prefectural and Local government
- ► Improve co-ordination and access to market information for PFI projects at the National, Prefectural and Local government level
- ► Amending existing legislation to permit private sector participation in a wider range of public infrastructure services such as road, rail, ports and airports
- Increase scope of private sector participation in PFI projects to include a whole of life approach
- Encourage increased use of PFI delivery at the National, Prefectural and Local government level
- ▶ Increase awareness of infrastructure as an asset class to Japanese institutional equity
- Consider introduction of new legislation, similar to J-REITs, which facilitates long term institutional equity investment in infrastructure

As the Australian market continues to evolve into new sectors such as urban rail and renewables, and that the scale of the projects become larger and more complex there will be greater opportunities for Japanese contractors and financiers to participate in the PPP market. The challenge for these entities will be to increase awareness of the domestic participants of the technical skills and financial resources that they can bring to a consortium.

## 6 Analysis of the Japanese PFI market

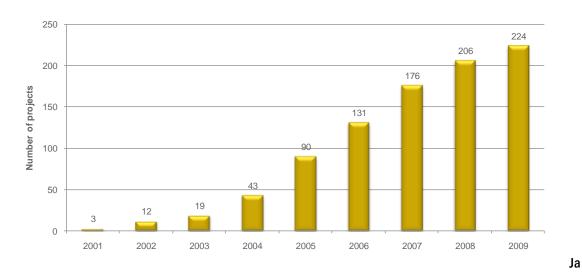
#### 6.1 Overview

Japan's PFI Law was enacted in 1999 with additional guidelines and a revision issued in 2001. Japan's PFI market has seen growth following these steps taken to promote PFI. There has been significant PFI activity in Japan across a number of sectors, including government accommodation buildings, education, health and recreational facilities.

The Japanese market is characterised by smaller projects (Y5bn-Y30bn/A\$61mn-A\$364mn), primarily across the social infrastructure sector (e.g. government buildings, schools and hospitals). These have been delivered mainly on a BTO basis. The Japanese model limits the degree of risk transfer, and as such, means that the scope of services for private sector participants is limited to construction and finance and does not allow them to take a whole of life view to service delivery. Whilst this relatively simple approach helps to expedite delivery of infrastructure projects, it does mean that both domestic and international investors and operators have limited interest in bidding into the Japanese PFI market in its current form.

The current accounting and taxation legislation in Japan also acts as a deterrent to investment by long term institutional investors investing in PFI projects in Japan and therefore does impact the amount of capital that can be raised to facilitate investment in infrastructure projects. It also means that the Japanese public sector is not gaining access to the key benefits of risk transfer, improved quality of services and VfM outcomes that properly structured PFI projects can deliver. In order to obtain these benefits and to attract greater interest and investment in the PFI infrastructure market, Japan will need to take a more sophisticated approach to contract issues such as risk transfer, whole of life costing and incentive mechanisms.

Diagram 4: Japanese projects to reach operational phase



Currently ,the Japan PFI market contains around Y200bn-300bn (A\$2.4bn - A\$3.6bn) of closed projects with the value of individual projects ranging from Y5bn-30bn (A\$60.7mn - A\$364.5mn). Around 220 projects have reached the operational phase.

## 6.2 Legislation, Policies and Procedures

Private sector involvement may be procured under the legislative framework in Japan on a National, Prefectural and Local Municipality level and/or by government related organisations.

In Japan, the legislative framework for infrastructure can be divided between two levels:

- National level (National Property Law)
- ► Local level (Local Autonomy Law)

Procurement of services and products from the private sector by Government has always existed, but in more recent years, the private sector input for public infrastructure, facilities and services are promoted mainly under the following three initiatives:

- ► Act on Promotion of Private Finance Initiatives (the PFI Law)
- ► Public Services Reform Act
- Designated Manager System

While these initiatives have proven positive in facilitating private sector involvement some of the larger key infrastructure sectors such as roads, ports and airports have be restricted by Property Legislation. This has an important impact on certain key sectors and has precedence over other legislative initiatives.

#### 6.3 Legislation restricting private sector participation

In Japan, economic infrastructure projects have been limited by provisions under the Public Property Administration Laws. These laws regulate assets that the public sector manages, such as roads, sewerage and city parks.

Under this collection of laws, the role of the private sector is limited. These laws specify that the private sector cannot either:

- ▶ Own specified public infrastructure
- ▶ Operate or manage public infrastructure

The complete scope of work the private sector can undertake under the collection of the PPA Laws(Public Private Administration Laws) is set-out in "On the scope of work private sector parties can undertake on public facilities" published in June 2004 (80 pages, in Japanese) - http://www8.cao.go.jp/pfi/160601gyoumuhani.pdf

As part of this work, MLIT were asked to list legislation that governs the infrastructure they are responsible for and classify the legislation into one of three categories:

- 1. The private sector is not allowed to be a manager of the facility
- 2. The private sector basically cannot allowed to manage the facility, but there are exceptions
- 3 Anyone (Private or Public) can manage the facility

The outcome from a selection of the responses is included in the table below:

Diagram 5: PPA Laws and private sector provisions

Legislation	Category based on questionnaire		Details
Railway business law	3	•	Under the Railway business law, there are no restrictions on who may operate the railway business. The private sector has historically participated in the railway business.
Road transportation law	3	•	The road business operator (National/Regional Governments) can contract private sector operators to undertake business on its behalf, but ultimate responsibility to third party users rests with the road business operator (Government body).
Road Law	1	<b>&gt;</b>	The Road Law provides exclusive rights to MLIT/ Regional Governments for a multitude of matters including: newly establishing, renovating or managing a road; making decisions on changing the routes; starting/ceasing public use of a road; determining the use for the road etc.
		•	The private sector may undertake the actual activities of construction and maintenance.
Aviation Law, 1 & 3 Airport Maintenance Law	1 & 3	•	The Airport Maintenance Law provides that National and Regional Governments must maintain airports that are considered to be part of the aviation network and share in the expenditure based on certain allocation.
		•	The actual establishment and management of the airport facilities is governed by the Aviation Law, and private entities may also be managers of the facility.
Port Law	3	•	Under the Port Law, the establishment and management of port facilities is not limited to the public sector. There are a number of port facilities that are established and managed by private entities.
City Park Law	1	•	Establishing, managing, and setting restrictions on use - the rights to carry out these are exclusively provided to the National/regional Governments under the City Park Law. PFI operators may undertake certain activities approved by the manager of the Parks such as holding events, functions and classes in the Park, maintenance activities, cleaning, gardening activities.

#### 6.3.1.1 Act on Promotion of Private Finance Initiatives (the PFI Law)

Private Finance Initiatives provided under the Act on Promotion of Private Finance Initiatives (the PFI Law) are promoted by the PFI Promotion Office within the Cabinet Office of Japan.

The PFI Law was enacted in Japan in July 1999 and is modelled on the PFI system in the UK. The PFI Promotion Office has since issued a policy outline and four guidelines regarding various aspects of the PFI system in Japan. The guidelines issued to date are as follows:

- ▶ Process guideline
- ► Risk sharing guideline
- ► Contract guideline
- Monitoring guideline

#### 6.3.1.2 National, Prefectural and Local Based procurement

Out of the 339 PFI projects undertaken to FY2008, 130 projects were administered by Local municipalities, making up the largest proportion of PFI projects based on administrator type.

A project would generally be overseen by the particular division/section/bureau within the Government body with responsibility for the relevant infrastructure. Throughout the PFI process, other parts of the Government or local council offices may be involved, such as the treasury group, legal group and the secretariat. Typically, regional administrative bodies do not have a pre-dedicated PFI team.

Whilst all PFI projects should be undertaken under the legal structure established by the PFI Law, some prefectures/cities/municipalities have developed their own PFI policies and guidelines to help identify projects for which the PFI approach should be considered.

## 6.4 Project Type, Size and Scope

The Japanese PFI market is characterised primarily by social infrastructure projects which are typically of relatively low capital value of approximately Y5bn-Y30bn (A\$60.7mn-A\$364.5mn). Projects involving economic infrastructure (ports, airports, highways, roads etc.) are not feasible to be delivered through the use of PFI under current Japanese legislation.

The PFI projects completed to date have been largely limited to hard services such as construction or maintenance of buildings or equipment. Projects are normally set out from an input based specification with the government focussing on a specified set of detailed requirements for the bidder to deliver against. The preferred delivery model for the majority of PFI projects in Japan has been the BTO model. This model limits the degree of risk transfer to the private sector as the scope of services for private sector participants is limited to construction and finance and does not allow them to take a whole of life view to service delivery. Consequently, the key advantages of private sector participation are lost as the private sector cannot demonstrate its ability to drive VfM through innovation, asset utilisation, whole-life costing or efficiencies from delivery of multiple services.

Whilst this relatively simple approach helps to expedite delivery of infrastructure projects, it does mean that both domestic and international investors and operators have limited interest in bidding into the Japanese PFI market in its current form. Recent information from the Japanese Cabinet Office has shown up to 40% of projects only attract one bidder and up to 70% of projects attracting only two bidders. Further, 21 of 69 projects in the 2007 fiscal year attracted no bidders. This eliminates or significantly reduces competition and consequently the government's ability to deliver VfM.

### 6.5 Market Participants

The type and size of projects in the Japanese market has driven the participants in normal consortia. With the majority of projects coming to market on a BTO (Build-Transfer-Operate) basis consortia are formed to address this input based specification. With the majority of PFI projects completed being limited to hard services such as construction or maintenance of buildings or equipment, consortia members are restricted to providing these services. Consequently, construction companies play the largest role in the SPC that is formed to deliver the project. With projects being in the range of (Y5bn - Y30bn/A\$60.7mn - A\$364.5mn) the normal participants are local, Prefectural based construction companies.

The absence of ongoing service delivery other than building maintenance also restricts the need for technical, operational or engineering specialists and these roles are normally undertaken by the public sector.

In addition the majority of projects in the vicinity of Y5bn – Y30bn (A\$60.7mn - A\$364.5mn), the financing requirement is low in comparison to institutional investment requirements as the resources required to understand the project and meet due diligence will impact the ability to achieve a required return and correspondingly, the public sector comparison price for taking a bidder forward. This has meant that projects have seen the majority of finance for projects in Japan come from the construction company delivering the project (equity), supported by bank debt .

Consequently. Consortia formed in Japan typically consist of:

- ► A Japanese bank providing debt to the project
- A construction company with demonstrated experience in the sector of the project being delivered and with ability to provide the equity required
- ► A facilities management company (hard /soft FM(facility management))

The Japanese market has seen a declining rate of bidders as projects have remained on a small-scale, locally procured and restricted to a BTO (Build-Transfer-Operate)approach. Projects are primarily bid at a localised

level, and without projects evolving to include a full range of sectors and services, there have been limited opportunities for the bidding market to expand in parallel.

#### 6.5.1.1 Involvement of foreign entities

There are no legal restrictions on foreign players in bidding for Japanese projects. However, due to the small size of projects, limited scope of services and the very decentralised procurement processes in the Japanese PFI market, there has been very limited evidence of foreign entities participating in PFI or public Infrastructure delivery in Japan.

#### 6.6 Financing

Given the relatively low risk transfer to the private sector within the Japanese PFI model, the typical financing solution used is a highly geared one with debt or bond financing in the range of 90+% of total project cost and equity investment of around 10%.

The debt market will typically extend to life-loan with projects lasting 15-30 years eliminating the need for a refinancing within the contract term.

### **6.6.1** Equity

SPC(Special Purpose Company) equity investors are usually one of the project delivery companies of the consortium, such as a construction firm. While they earn returns from construction fees, they do not have an incentive to earn dividends or returns through the operation of the SPC.

Japanese legislation places restrictions on equity returns prior to the repayment of debt in a leveraged company, and as a result, the SPC generally does not pay a dividend since it is structured to avoid dividend payments (and consequently withholding tax), the impact of which is a highly geared delivery vehicle.

#### 6.6.2 Debt

The majority of activity in the PFI market has been debt financed by banks. Japanese banks have dominated the funding market for PFIs and normally support the contractor on a relationship basis.

#### 6.6.3 Institutional investment

Japanese infrastructure projects to date have failed to attract institutional investment and have relied on bank funding. The issues that may prevent facilitation of institutional investment into PFI projects include:

- Lack of recognition of infrastructure as an asset class
- ► Taxation of operating profits of the SPC and dividends to shareholders (see section 2.7)
- ► Limitation on equity returns in a geared structure
- ▶ Insufficient risk/return profile to attract investment
- Relatively small size of projects in the market

#### 6.6.3.1 Facilitating institutional investment in infrastructure: J-REIT?

The Japanese real estate securitisation market has seen growth since the inception of the J-REIT (Japanese Real Estate Investment Trust) in 2000.

A J-REIT is a vehicle that is allowed to take a tax deduction for dividends paid provided that it meets certain statutory requirements, including that it must annually dividend out more than 90% of its taxable income.

Within a short period, J-REITs have gained broad acceptance among both foreign and national players and Japanese individual and institutional investors as a viable investment vehicle.

From the initial introduction of J-REITs, they were mainly focussed on investment in office buildings. Recently, a number of J-REITs have included residential J-REITs, commercial J-REITs, and logistics J-REITs (e.g. warehousing).

The use of a J-REIT-type structure would be a possible avenue of attracting institutional investment in infrastructure. This may be through extending existing legislation to cover projects procured under the PFI Law or other private sector initiatives highlighted in section 2.3.1.1, allowing a collective investment vehicle for investors to achieve returns in the sector.

### 6.7 Taxation Systems

The existing tax regime in relation to Japanese PFI projects does not differ from the Japanese company taxation structure, as PFI bids in the Japanese market are structured through a SPC(Special Purpose Company), normally a registered corporation.

Normally the capitalisation of the company is bank funded with little equity investment and therefore supported through either the equity provider's (normally the construction company) balance sheet or by direct agreement with the Japanese Government against the investment.

The main difficulty of this structure for institutional investors (foreign or local) is the current structure of being taxed on SPC(Special Purpose Company) operating profits as well as any dividend distributions being subject to withholding tax at source, under which distributions will be captured.

Payments made in Japan of the following income to residents are subject to withholding at source:

- Interest (including profit on redemption on specified discount bonds)
- Dividends
- ► Salary, wages, bonuses and similar compensation
- ▶ Retirement allowances
- ► Certain compensation, fees, etc., to persons other than employees

#### 6.7.1 Withholding tax on domestic corporations

Payments made in Japan of the following income to domestic corporations are subject to withholding at source:

- Interest (including profit on redemption on specified discount bonds)
- Dividends
- ▶ Distribution of profits in accordance with a Tokumei Kumiai contract

# 6.7.2 Overview of the taxation of profits repatriated to foreign investors by the project company

Where non-resident (Australian) participants are the shareholders of the SPC (Special Purpose Company), any dividend payment will be subject to dividend withholding tax in Japan.

Under the Japan-Australia Double Tax Agreement (DTA), where the shareholder owns 10% or more, the dividend withholding tax rate is limited to 5% - otherwise it is generally 10%. If the shareholder is a listed company (or otherwise satisfies the definition of a qualified person in Article 23 of the DTA) and owns at least 80% of the shares for 12 months, then the dividend withholding tax rate is reduced to nil. There are special rules that apply to entities other than corporations.

#### 6.8 Opportunities for private sector participation in the Japanese PFI market

## 6.8.1 Main Sector Participation

In 2009, the government announced a Y15 trillion (A\$1.8bn) fiscal stimulus package, including infrastructure spending on healthcare and transportation with the objective of:

- ► Establishing grants for revitalising medical care in the regions: Y310bn (A\$3.7bn)
- Connecting "missing links" in the existing road network: Y250bn (A\$3.0bn)

In order for the private sector to have a meaningful role in the delivery of these projects, there is a requirement that current PFI legislation be amended to facilitate opportunities for private sector investment.

### 6.9 Issues for private sector participation in the Japanese PFI Market

### 6.9.1 Project Size and Scope of Services

The PFI pipeline in Japan is characterised by a large number of smaller projects on a BTO Build-Transfer-Operate)basis. This reduces the opportunity of the private sector to demonstrate VfM through innovation and whole-of-life costing, and limits their ability to achieve returns by delivering services throughout the project life. The size of projects is not attractive for institutional investment, further restricting project size and scope.

### 6.9.2 Legislation restricting private sector participation

As highlighted in Section 2.2, one of the reasons for the lack of PFI/PPP in large-scale economic infrastructure projects in Japan has been the existence of the Public Property Administration Laws. Under this collection of laws, the scope of work the private sector can undertake is limited, the primary inhibitor being the commonality across these laws that the private sector cannot generally own or operate projects.

#### 6.9.3 Taxation of Japanese Special Purpose Companies

There is presently no viable structure for efficient payment of returns from Special Purpose Companies to their equity holders. Unlike other markets (e.g. Australia) where profits are taxed at the operation level and distributions made on a "franked" basis or with a "tax credit" associated, current Japanese structures require taxation at an operating level and withholding tax on dividends or distributed income.

This may create an investment barrier to institutions and the capability of Japanese PFI projects to attract capital. It may also be a limitation to Japanese project size and be an underlying element in the restriction of deals to the range of A\$50mn-A\$100mn (Y4.1bn-Y8.2bn).

#### 6.9.4 Access to project information and local procurement agencies

One of the consistent messages conveyed by interviewees was the disparate nature of information on the Japanese project pipeline. At present, there is no central depository for market information for PFI projects in Japan.

Project information is held at a Prefecture level and this restricts potential market interest in PFI projects. In addition, information that is made available is typically presented in Japanese only. Thus, there is no readily available supply of project information in English which makes it difficult for potential Australian and other overseas market participants to have visibility of the pipeline of projects in the market and to identify opportunities where they might wish to participate in the Japanese PFI market.