Public and Private Sector Partnerships - Review of International Models and Experiences

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Preface

This Paper is one of a series of jointly funded reports commissioned to investigate impediments and opportunities for the development of large-scale water enhancement projects in New Zealand, with a primary focus of providing water for community irrigation schemes. Other reports cover the areas of: equity investment options, the role of central government, the role of local government, and economic and social assessment parameters. An overview and commentary document summarises the key issues raised in the reports.

The future use of water, in the South Island especially, is a critical issue for regional and central government and private investors. As water is a finite resource that has multiple uses and development requires significant, long-term, investment flows.

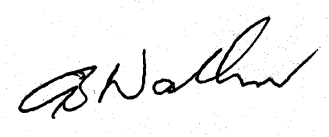
These reports, which consider the use of water for irrigation, arose from feasibility studies by a number of farmer groups (many of whom have contributed to funding of these reports) into large community-wide irrigation projects. The feasibility studies highlighted the need for information to assist co-operative action for the financing, building and running of irrigation schemes.

This paper reviews international experience in Victoria (Australia), the UK and other European countries in the establishment of public and private partnerships (PPP) for the designing, planning, constructing, financing and/or operating and ownership of major public service infrastructures.

The reviewer notes that there is a strong interest amongst private sector players to be involved in PPP projects in irrigated agriculture, so long as the investment climate is supportive. However, the level of understanding in NZ of PPP is generally low and local experience is inadequate to give confidence that lessons learned elsewhere have been taken into account. The author concludes that the role of Government in supporting and facilitating PPP in other jurisdictions involves interventions in the legislative and control environment, and substantial support in the early stages of the PPP process. Possible ways that central and local government in NZ could facilitate development objectives are described in companion studies.

The reviewer notes, that in all of the countries where PPP has become an increasingly important method of developing infrastructure projects, policy decisions have been based on extensive analysis, and subsequent specific support and procedures developed by Government. In some cases legislative change has been necessary.

I would like to acknowledge the experts who wrote these reports, the reviewers who made their contribution, and the many people in the farming community and local government who have made their views known. This report reflects their views and will be a useful contribution to government policy analysis.



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* The Agricultural and Marketing Research and Development Trust (AGMARDT), earns income from funds invested from a share of the monies arising from the winding up of the Phosphate Commission in 1987. This income is used for promoting and encouraging excellence in New Zealand's land-based industries. Grants are made for farmer projects involving grass-roots problem solving and opportunity development, industry support, conference sponsorship, doctoral scholarships and postdoctoral fellowships. Farmer groups are encouraged to seek details on AGMARDT's applications process by accessing the website on www.agmardt.org.nz or contacting the Secretary Manager, P.O. Box 399, Shortland St, Auckland, Tel. (09) 373 3370, Fax (09) 373 3488.

Contents

1. Executive Summary

This report focuses on international experiences for financing and implementing large-scale infrastructure projects in general, and water enhancement projects in particular. The study is based on a literature search and information gathering exercise to capture the essential elements of experiences in Europe, the United Kingdom and closer to home and in more detail, in Australia. The experiences in some developing jurisdictions – Malaysia and developing member countries of the Asian Development Bank – are also reviewed. The study was assisted by a study tour of developments in Victoria, during which discussions were held on the experience with PPP processes operating in that state since 1994. Meetings were held with officials, private sector partners and users of infrastructure projects developed under the Victorian Public Private Partnership (PPP) models.

Emphasis is given here to PPP models for project implementation, because the details of traditional design and construct and design build options are well known in this country, and because of current interest in non-traditional implementation mechanisms for the suite of water enhancement proposals that are currently being developed.

PPP is a "partnership between various public administrations on the one hand and legal persons subject to private law on the other, for the purpose of designing, planning, constructing, financing and/or operating an infrastructure project. The key feature for a successful PPP is the allocation of the project's risks between the public and private sector according to each party's ability to manage and bear them, without destroying the economic balance of the project."[1]

The reasons postulated in support of the PPP model for infrastructure development include:
i) greater cost-effectiveness in managing project risks;
ii) savings captured/benefits enhanced because of better time-to-delivery;
iii) accesses private sector innovation and management skills;
iv) lower demands on governmental operating budgets, reduced fiscal deficits;
v) better value-for-money for government and community.

In reviewing the international experiences with the general PPP model and its variants, the study showed:
i) PPP is not a panacea for delivering public infrastructure projects, but its use is increasing in all jurisdictions, albeit with substantial modifications to the original UK formulations to suit local circumstance.
ii) The most experience with PPP is in the United Kingdom and Europe. The Irish experience is relevant to NZ insofar as it has developed its polices with the benefit of lesson learned elsewhere and has adapted PPP processes to fit its own circumstances.
iii) There have been problems with PPP models where the private sector party deals directly with the communities receiving service – this is particularly evident in provision of water supply services, privately run prison and health services.
iv) The PPP business environment is becoming increasingly mature in some jurisdictions, but experience in NZ is limited. A common finding was that early experiences determine later success – success leads to increasing adoption, failure through inappropriate arrangements can lead to rejection by both parties.

[1] High-level Group on Public-Private Partnership Financing of Trans-European Transport Network Projects CTENS), Final Report

Insofar as NZ is concerned, PPP experience is minimal. The first truly BOOT project for a small sewage system in Northland is under development with assistance of experienced advisers from the Victorian PPP industry. Toll roads are being proposed under BOOT for the Auckland region. There have been preliminary discussions between some farmer companies and private sector interests about water enhancement infrastructure provision in North Otago.

The report examines the issues that would need to be discussed if the NZ Government wanted to take the adoption of a PPP policy position further, based on the policy platform of the Victorian Government in this regard. The parameters of importance to the private sector in Victoria are also reported and analysed in the context of the NZ situation. From these analyses, the following general conclusions are drawn:

1. Large scale water infrastructure projects are funded by Governments under traditional design and construct models in some developed economies and in many transition and developing economies.

2. There is increasing use of a range of Private Public Partnership (PPP) funding models used in developed economies to provide core Government services.

3. No completed examples of large scale water enhancement projects implemented under PPP were found, although the Deakin Irrigation project proposals in Victoria have been based on this model.

4. There is a strong interest amongst private sector players to be involved in PPP projects in irrigated agriculture, so long as the investment climate is supportive. This is particularly so for interests in Australia and traditional PPP players in Europe.

5. The use of PPP is now being suggested in local debate as a mechanism for providing public sector infrastructure, initially in the transport sector. The level of understanding in NZ of PPP is generally low and local experience inadequate to give confidence that lessons learned elsewhere have been taken into account.

6. The role of Government in supporting and facilitating PPP in other jurisdictions involves interventions in the legislative and control environment, and substantial support in the early stages of the PPP process. In some EU countries, Government has taken a financial position in asset provision in situations where direct revenue steams were insufficient to support the investment, and total benefits justified the intervention.

7. If the NZ Government was interested in creating an environment supportive of private sector interest in PPP developments of large scale water infrastructure projects there are several initiatives required:
   i) A more detailed analysis of private sector needs and constraints, than has been possible under resources devoted to this study.
   ii) Investment opportunities suitable for PPP need to be identified.
   iii) A commitment to pursue PPP implementation where appropriate.
   iv) Identification of a pilot PPP project with minimal difficulties to gain experience.

8. In all of the countries where PPP has become an increasingly important method of developing infrastructure projects, there has been policy decisions based on extensive analysis, and subsequent specific support and procedures developed by Government. In some cases legislative change has been necessary. It is an unresolved question as to whether such initiatives are appropriate in the NZ context.

2. Objective and Scope

The objective of this study is to assemble and review relevant information about the ways that the funding of large-scale water enhancement projects is managed in other countries, and to relate the findings to the current situation in NZ.

The scope of the investigation has been limited to economies and political environments that are similar to those existing in NZ, in order to identify aspects that may be readily transferable.

2.1 TRADITIONAL FUNDING MODELS

This report does not review traditional methods of procuring infrastructure by the public sector for the delivery of public good services. This model is often referred to as the Design and Construct Model (D&C). The D&C models used in each jurisdiction are similar:

- a policy decision taken and budget provision made by the state to provide infrastructure;
- a government agency deals with the design of the infrastructure and preparation of tender documents;
- contracts are awarded competitively in the private sector according to set procedures;
- payment is made under contract terms to the contractor;
- supervision is provided by the agency or its agents; and
- the completed infrastructure is passed to the state after contract requirements are met.

There are variations on this traditional model. The most common is the Design and Build (D&B) option where the private sector provides all finance for the design and construct stages, and payments are made and infrastructure passed to the state after contract terms are met. D&B is being used routinely in NZ by local government, and local experiences are reviewed in the study 2 report.

2.2 GENESIS OF PUBLIC PRIVATE PARTNERSHIP MODELS

This report explores a range of public private partnership (PPP) models utilised internationally for infrastructure provision in an international context.

The PPP model has been defined as follows:

> "a partnership between various public administrations and public bodies on the one hand and legal persons subject to private law on the other, for the purpose of designing, planning, constructing, financing and/or operating an infrastructure project. The key feature for a successful PPP is the allocation of a project's risks between the public and private sector according to each party's ability to manage and bear them, without destroying the economic balance of the project."[2]

In Britain, the PPP concept was launched in 1992 as the Private Finance Initiative (PFI) as an initiative to increase access to private sector capital flows for infrastructure projects at a time when public capital resources were constrained. This was the basis for the first PPP policy developed in the State of Victoria, Australia – Infrastructure Investment Policy Victoria (IIPV).[3] After a change of Government in Victoria, a modified version of the IIPV policy was adopted – Partnerships Victoria (PV).[4]

[2] High-level Group on Public-Private Partnership Financing of Trans-European Transport Network Projects (TENS), Final Report
[3] State Government of Victoria, Department of Treasury, Infrastructure Investment Policy for Victoria, June 1994
[4] State Government of Victoria, Department of Treasury and Finance, Partnership Victoria Guidance Material, 4 volumes.

Interest in PPP in the EU member states has been extensively documented, and shows that a number of variations of the original British model have been used for infrastructure projects, mainly in the transport and urban water supply sectors.[5]

In Britain, there are two main types of PPP transactions that have developed since 1992:

- Financially Free Standing Projects – where the private sector designs, builds, finances and operates the project, recovering all costs through direct charges to the private users rather than payments by the public sector. The role of the state is to facilitate the process.
- Joint Ventures – where costs are met by a combination of user charges and state subsidy related to asset development. This form of transaction arises because the non-user community receives some benefits and direct user charges are not sufficient on their own to support the investment.

The question that is addressed here is whether these non-traditional funding models have relevance to NZ. The current situation in NZ is that there is no formal policy in regard to PPP as described above. The reason that NZ has not followed the international initiatives in regard to PPP is not clear. An influential factor may be the public sector reforms of the early 1980s, and a limited need for access to private capital resources for a modest public sector infrastructure investment programme.

The five studies have been commissioned because of the potential need for access to substantial capital if economically desirable water enhancement infrastructure projects are to proceed. This report examines international experience with PPP models in other jurisdictions that may have relevance to the funding of such projects.

3. Basis of Investigation

The information reviewed in this report has been based on:

- literature and information search that has secured a number of key published and unpublished papers and reports of relevance[6];
- discussions with professionals working in the area of public private partnerships for implementing large scale infrastructure projects in Australia and at the Asian Development Bank;
- visits to Victoria and Tasmania to investigate first-hand promising developments, in association with study 2 consultants;
- consideration of parallel work of relevance emerging from studies 2 and 3.

The main documents utilised are footnoted. The main persons contacted during field visits are detailed in Annex 1.

[5] Report to the Inter-Departmental Group in relation to PPP, Farrell Grant Sparks et al, July 1998.
[6] Relevant source material is footnoted and the information and documents collected have been provided to client.

4. Categorisation of Country Experiences

The TOR called for focus on funding models in Australia and in some transition economies, such as Malaysia, where considerable use has been made of private sector funding models for infrastructure development.

For the purpose of this report, the experiences have been reviewed in two types of jurisdictions – developed economies and transition economies. Included in the developed economy category, are the experiences in Australia, Ireland, USA and the UK. The review of funding arrangements in transition economies is based on a more general overview of aspects of relevance to the NZ situation, as some of the models are clearly not applicable to NZ.

5. Developed Economies

5.1 EUROPE

The most common application of PPP in Europe is in the transport and urban water supply sectors where users are easily identified and revenue streams at least partly support the investments. It has been accepted that PPP is not suitable for meeting all of the infrastructure needs, but needs to be regarded as a flexible model that can be adjusted to suit project circumstances. The Governments involved have seen their role as a facilitator and enabler of the PPP projects, but investments in assets has been taken when the circumstances dictated and the national interest required. No information was found as to the application of PPP to water enhancement in the rural sector in the European experience.

5.2 IRELAND

The Irish Republic has followed the European and British developments in supporting the concept of PPP as a matter of policy. The supporting material prepared as part of the Irish studies outlined the reasons for this support:

- time to delivery savings;
- capacity constraints in the economy, including labour skills and infrastructural deficit;
- EU rules as to need to run state surpluses – the Maastricht criteria.

In the Irish situation, skill shortages in the local public and private sector were considered to be a main reason for accessing non-local skills via the PPP model. The Exchequer in Ireland has considerable scope to provide infrastructure from public funds, in contrast to the UK, so that the budget constraint imperatives for PPP adoption are not as strong.

Advice given to the Government in 1998 was to proceed carefully with pilot applications of PPP, in circumstances that indicated lowest ex-ante risks. The Government developed its PPP policy in 2000 – well after Britain and Victoria. A detailed description of the Irish PPP policy is available, but in general terms it mirrors the UK and Victorian material.[7]

One aspect of the approach taken by Ireland, was that the PPP policy and timeframe was influenced by the specific circumstances of the economy and the advantages of the experiences in the UK and elsewhere.

[7] Department of Environment and Local Government, A Policy Framework for PPP, PriceWaterhouseCoopers, April 2000.

5.3 UNITED KINGDOM

As at 1998, there were some 300 ongoing PPP projects in the UK, covering service and asset provision in the health, education, transport and water supply sectors. It is likely that this number would have increased considerably in the interim period. The investments by the private sector was $45 billion in 1998 with a further $30 billion in the pipeline. No projects in the rural water sector have been identified in the UK.

There are clear differences between the NZ situation and that of the UK, not the least of which is the size of the market. As well, the UK experience with PPP is probably greater than in any other country. Consequently, there is a mature PPP industry, to the extent that UK water companies and consultants have exported their experience in the form of PPP offerings and associated consultancy services.

The recent conference on PPP in Auckland[8] has highlighted several developments from the UK experience that reflect increasing sophistication in handling PPP activities:

- early interest from the private sector in PPP was below Government requirements, and did not accelerate until a special PPP task force was set up in Treasury in 1995, involving private sector expertise, and providing a single focus for PPP initiatives;
- effectiveness was improved with the development of standard set of contracts, which considerably reduced the transaction costs associated with pre-1995 PPP projects; and
- the Treasury task force has since developed further into the PUK[9] organisation, a stand-alone commercial enterprise.

5.4 USA AND CANADA

The utilisation of PPP models in the USA is more limited in comparison with the European activity. The most common funding model used for infrastructure development in the USA is by way of bond issues from stakeholder partners.

A recent development in the USA and Canada has been the establishment of a Water Partnership Council (WPC), consisting of large water development companies. This has developed to assist with meeting the needs of the water and waste water sectors for costly refurbishment.[10] One company – USFilter – claims to have 329 PPP systems in operation as at 2002 with increasing interest, and a further claim that the number of PPPs managed by Council members in the USA could be in the thousands.

Experience in the USA shows up problems when Federal taxation law and State regulations are not favourable to aspects of PPP implementation, and one objective of the WPC is to seek rationalisation of the legislative and regulatory environment. PPPs have therefore developed without over-arching policies designed to facilitate the model application.

5.5 AUSTRALIA

The birthplace of PPPs in Australia was in Victoria, which followed closely both variants of the UK model for PPP. Investigations within the professional community in Australia showed that the Victorian experience was most relevant to this study.

[8] Conference on PPP, Auckland 27-28 August, 2002
[9] Partnerships United Kingdom
[10] The US Environment Protection Agency estimates that an investment of $150 billion over the next 20 years to rehabilitate older water and waste water systems in the USA.

5.5.1 IIPV Model

In 1994 the Department of Treasury in the State Government of Victoria issued the Infrastructure Investment Policy (IIPV) [11]for Victoria, which contains the following Objectives and Guiding Principles:

Objectives

In seeking private investment in the provision of infrastructure and related facilities, the Government aims to:

- procure assets, goods and services in the most efficient, cost-effective and timely manner;
- take advantage of new technologies and innovation, private sector management skills and a wide range of financing techniques;
- promote the growth of new and existing Victorian businesses and employment; and
- strengthen the State's economy, producing social, cultural or other quality of life benefits.

Guiding Principles

In seeking private sector investment, the Government intends to:

- give private participants the scope to exercise flexible management processes, to display innovation and to be rewarded accordingly, within a competitive environment as far as possible;
- allocate risk to those parties which the Government considers best positioned to assess and manage it;[12]
- maintain its flexibility to respond to changing circumstances by avoiding long-term inflexible undertakings;
- encourage forms of private sector involvement which can result in lower costs to Government, taking into account the risks transferred from the Government and other benefits and costs associated with private sector participation; and
- secure private sector participation through the application of competitive bidding wherever possible.

The Government undertook to promote private sector investment in the provision of infrastructure only where such involvement will clearly provide the most effective solution for the State.

Forms of Infrastructure Investment

When formulated, the Government policy applied to service provision that was considered to be clearly Public Good and a responsibility of Government – i.e. core public good services such as:

- operating and management contracts for hospitals, maintenance of Government assets;
- turnkey project delivery for State roads;
- BOT, BOO and BOOT[13] projects for hospitals, port facilities, prisons, toll roads, water treatment facilities, sewerage, drainage (user-pay projects);
- privatisation within industries such as energy, health, water and sewerage.

The IIPV policy documents issued at the time included information as to responsibilities within Government for actions and approvals, the project management process, taxation, IP ownership, and contract contents in general terms.

[11] State Government of Victoria, Department of Treasury, *Infrastructure Investment Policy for Victoria*,, June 1994.
[12] The PV documentation provides a comprehensive description of project risks applicable to one or other party in the following categories: (i) site: (ii) design, construction and commissioning; (iii) sponsor and financial; (iv) operating; (v) market; (vi) network and interface; (vii) industrial relations; (viii) legislation and government relations; (ix) force majeure; (x) and asset ownership.
[13] BOT refers to build-operate transfer, BOO to build-own-operate, and BOOT to build-own-operate-transfer.

The Victorian experience under IIPV was mixed, with successes and failures. One area of failure was business collapse on the part of the private sector partner, and the need to ensure "step-in" rights for Government.

A clear issue that developed in the implementation phase of some IIPV projects was the problems encountered when the private sector dealt directly with consumers in the provision of services – patients, prisoners, water consumers and so on. The failure of some initiatives and the unpopularity of the direct private sector-consumer relationship created a political climate for change.

5.5.2 PV model

Following a change of Government, the IIPV policy platform was re-visited and a comprehensive review of public private sector partnerships in the international context was undertaken. This resulted in a new policy – Partnerships Victoria (PV) – launched in June 2000[14].

The PV material is a detailed description of the policy, its justification and the procedures and detailed processes to be followed.

The Policy

The PV policy provides a framework for integrating private investment into public infrastructure. In common with the earlier IIPV, it focuses on whole-of-life costing of infrastructure and related services, with full consideration of benefits of transferring risk to the private party.

PV is primarily related to provision of services that are clearly the domain of Government. The prime consideration is to identify the project delivery mechanism that provides best value for money in meeting Government objectives.

Procedures – Implementation of Policy

PV contains some clear differences to IIPV. The first and most fundamental is the concept that government itself should retain direct control of certain core public service for which it has a particular responsibility to service recipients and the community.

The second difference is the use of a Public Sector Comparator (PSC)[15] so that the cost of Government provision of services can be objectively compared to private bids. Development of the PSC requires a rigorous procedure to compute the value (cost) of risk allocated to each party.

The third initiative in PV is a public interest test to ensure that criteria in regard to probity, transparency and other matters are met. This test is designed to protect the interest of the wider community and affected third parties.

It is clear that the current PV aims to exploit the potential advantages of private participation in public-good infrastructure projects and related services, as well as to avoid the problems experienced with IIPV projects.

[14] State Government of Victoria, Department of Treasury and Finance, *Partnership Victoria Guidance Material*, 4 volumes: Vol.1, Overview, Vol.2, Practitioners' Guide, Vol.3, Risk Allocation and Contractural Issues, Vol.4, Public Sector Comparator – Technical Note, June 2001.

[15] The PSC estimates the hypothetical risk-adjusted cost if a project were to be financed, owned and implemented by government. It is based on the most efficient form of government delivery. PSC is comprised of base cost + transferable risk cost + retained risk cost.

The full set of Guidance Material for PV is available from the web: www.partnerships.vic.gov.au, and hard copies are to accompany this report. No further details are given in this report.

It is noted that the process of risk identification, allocation and the estimation of the costs of risk, is a valuable contribution to any party involved in large infrastructure projects – regardless of the form of project delivery.

The PPP Conference held in Auckland in August 2002, reported on a changing approach to PPP arrangements in the Australian context. It is now recognised that there are unforeseen risks that cannot be handled effectively under PPP contracts or by insurance instruments. This recognition is changing the PPP paradigm from one that includes a clear split between public and private partners under contracts, to more of a true "partnership" within a special entity set up to execute the PPP activity.

The Deakin Project

One of the drivers for the visit to Victoria was to assess developments in the proposed Deakin Irrigation Project in the Sunraysia areas of Victoria. The Government of Victoria (GV) has invested considerable resources in preparing this area for a PV scheme to deliver Murray River water to new lands adjacent to the areas covered under two existing Water Authorities – First Mildura Irrigation Trust and the Sunraysia Water Authority. The GV has financed detailed feasibility studies and project delivery investigations, and supported developments through the efforts of local and Melbourne-based DNRE staff. Investment of at least A$2 million to date has been involved with more to come.

Observations as to the difficulties observed in the Deakin Project are as follows:

- there is confusion created by the activities of the officials and this has pre-disposed the local players to be cautious about PV.
- water trading activities has encouraged private developers to take up new land development – the so-called "bypass risk".
- The private developments have resulted in sub-optimal resource use and have the potential to introduce environmental negatives that are difficult to manage.
- Local community representatives on the two water authorities are threatened by the Deakin proposals, in terms of their own positions and the situation of their farmer members.

It was expected that the Deakin Project under PV would provide valuable lessons for the applicability of PPP in the rural sector of New Zealand. What it showed was that the application of PV in a rural community is less easy than say for an urban water supply development, and the Government of Victoria is still struggling to resolve the issues. Some direct Government intervention is being contemplated:

i) to create a more receptive local climate for PPP, provision of assistance to address deferred maintenance in the existing water authority areas; and
ii) the possibility of the Government acting as guarantor for services not taken up by farmers in the early stages.

6. Transition Economies

6.1 MALAYSIA

Written material on the Malaysian experience with PPPs is difficult to obtain. One reason is that the terms involved in contracts between Government and the private sector are regarded as commercial in confidence.

From what is known, the main applications with PPPs are in the transport and water and waste water sectors, in common with other international experience. In order to reduce the burden on government funds, most of the PPPs follow the Build Own Operate Transfer (BOOT) models.

The Government process for PPP schemes normally involves selection of at least two potential consortia from the private sector – Government selects the consultants, contractors and financiers to be involved. The Government provides a specification of its service needs, and allows the consortia to develop proposals to meet these needs.

As far as is known, there is no Public Sector Comparator (PSC) developed by Government.[16] Consequently the BOOT proposals that have come forward are often quite different in terms of the infrastructure proposed to meet the same service delivery requirements. Comparison of costs with traditional implementation models and between alternative PPP proposals is therefore difficult.

The Malaysian Government experience with their version of PPPs is mixed. Toll roads have been developed under the model, apparently successfully. Water supply schemes that were privatised have met with community rejection when the private sector dealt directly with the customers.

In terms of value for money, a complicating factor is the practice of successful concessionaires to float the investment company immediately on winning the contract. Fund flows are therefore influenced by the nature of the public offer and market response, and may bear little relation to the original financial arrangements.

The process has however led to considerable innovation in competing proposals. Success seems to be accompanied with high returns on investment, and there has been strong private sector interest.

It is not clear whether the investments made represent value for money from a national viewpoint, but in effect the concessionary aspects of the arrangements represent capture of revenue streams from users, with little alternative to bypass the services, because of local circumstances.

To manage this situation, the Government was investigating (in 2001) appointment a Regulator in the essential services area.

[16] PSC is the total cost over the life of the project if the State followed a traditional D&C process to provide the service, and is a key requirement of the UK and Victorian processes.

6.2 ASIAN DEVELOPMENT BANK

The Asian Development Bank (ADB) provides finance to developing member country states for infrastructure developments. ADB has been the debt financier for many PPP schemes, particularly in the water supply, waste water and transport sectors.

The borrower for the ADB loan is the Government. The process followed involves a number of stages:

- the Government and ADB agree a development programme in line with country objectives and ADB policies and investment strategies.
- ADB carries out a series of investigations at its cost resulting in a detailed feasibility study that prepares a specific investment project in terms of the technical and economic features in a form suitable for assessment for investment – this work is done by ADB-recruited consultants.
- ADB appraises the investment from a number of standpoints – economic viability (IRR of at least 12 percent), environmental and social sustainability, and technical efficiency. Detailed implementation modalities will be defined. In the case of water supply and transport sector projects, this often involves D&B and BOOT models. User pay components are incorporated with the objective of covering all operation and maintenance costs and some proportion of capital cost recovery – in some cases 100 percent.
- If approved, the loan terms are negotiated and the ADB monitors the implementation progress of the project and the investment at regular intervals and in detail.
- After project completion a review is undertaken to audit all aspects and formalise lessons learned.

Discussion with ADB private sector staff indicated that the PPP model has been more cost-effective than traditional D&C methods in situations where local institutions are weak and annual budgets for adequate O&M were inadequate.

7. Issues of Relevance to NZ Situation

7.1 PPP IN A USER PAY ENVIRONMENT

This review did not find any situations where PPP models had been successfully applied to large scale water enhancement projects designed primarily for irrigation projects. The reasons are not clear. In the country experiences reviewed emphasis was given to using PPP as a way to provide core public services.

The closest match with the subject of this study is the use of PPP for providing and operating public water supply systems, considered to be a core state responsibility with elements of user-pays. However, it is these types of projects where difficulties in relationship between private owners of infrastructure and customers are most common.

The PV policy is primarily aimed at provision of core public services for which Government is the client. The PV Guidance Material does not deal as specifically with community infrastructure that operates in a user-pay environment, and where Government may have no operational role – toll roads, port facilities, and car parks. It is interesting to note that in other potentially user-pay projects (fully or partly) – like the provision of water supply and sewerage services – PV requires a government agency to interact with the consumer/customer.

The role of Government in non-core infrastructure projects under PV is not clear from the PV material. The material refers to Government "driving the process" and "facilitating", and protecting the interests of the community in contracts where the private sector is involved. Given that the focus of this report is on water enhancement projects where there is considerable private benefit involved – as well as regional and national benefits – it was necessary to explore the role of Government by investigating actual experiences in the application of PV policy to such projects.

7.2 GOVERNMENT PERSPECTIVES

One conclusion of study 2 is that some Government involvement is required, particularly in the early stages, if the current NZ suite of water enhancement proposals are to be implemented. The material reviewed in this study shows that access to private capital resources is a high priority for Governments in similar economies, and that creating a suitable environment for this to happen requires Government action. This is in line with the study 2 conclusion.

Involvement of Government in PPPs ranges from acting as a facilitator through to taking an equity interest when benefits to the community are significant and it is impracticable to access sufficient revenue to support the investment required.

The political and social situation in Victoria is similar in many respects to that in NZ, except that the Government policy in Victoria appears to be more interventionist in ensuring that general governmental policies and responsibilities are recognised in infrastructure developments and in use and management of natural resources. In particular, the Government of Victoria sees that it has a responsibility in regard to:

- facilitation of an investment environment that serves economic policy;
- optimisation of natural resource use;
- achievement of state economic growth objectives;
- achievement of regional development objectives;
- compliance with federally negotiated international agreements;

- current and inter-generational equity and fairness;
- ensuring probity in all transactions.

The NZ Government has similar general objectives and obligations. Based on the investigations of this study, the key perspectives of the Government of Victoria in regard to PPP developments are presented below, and related to the NZ situation.

- The Victorian Government has established the policy and operating framework for PPP schemes and published detailed guidance material, thereby making the investment climate transparent. It has been prepared to change current legislation when needed to facilitate PPP adoption. It should be noted that Victoria does not have dedicated PPP legislation – the legislative changes have been in the environment in which PPP operates.

  There is no formal PPP policy in NZ and it may not be justified, but if any steps were considered in this regard, it is considered that this has to be suitable for investment in any sector where PPP may be useful – not just for water enhancement. This would indicate the development of generic policy along the lines of PV, with specific sector modalities. It is noted that there is current interest in developing transport infrastructure under PPP in the Auckland region, and that legislative adjustments are needed to make this possible.

- The Victorian Government is prepared to invest considerable resources in assisting the private sector to obtain all of the statutory and regulatory approvals.

  The support available in NZ for pre-feasibility studies in minimal. It has arisen from an ad-hoc decision of the previous Government, and continued within the context of the Sustainable Farming Fund by the current administration, rather than a strategic commitment to irrigation. Given the nature of the RMA legislation in NZ, it will be difficult for any NZ Government to facilitate securement of resource consents. This is considered by the private sector in NZ and Australia as a major constraint for early involvement in PPP in NZ.

- The level of private sector interest in PPP involvement in NZ is directly related to the stability and security within the operating environment for investment.

  The NZ Government does not have a policy position to support or encourage international investment, in contrast to other jurisdictions. It is clear that a significant access to international private capital in this area of investment would benefit from any Government interventions that addressed private sector concerns about the security of their investments.

- The Victorian Government has recognised the need to provide for step-in arrangements in the event of private sector failure under PPP and to adjust legislation to allow private sector operators to gain access to facilities in times of emergency. The basis of these powers is to protect the interest of the communities and the resources involved.

  It is clear that the NZ government should have a position to protect the community and to ensure optimal use of resources where these are of national significance, if they wish to encourage large-scale water enhancement under PPP arrangements. Governments have considerably more powers than communities and it may be appropriate to see what can be done to empower and protect communities through Government actions.

- In Victoria the view is that finding willing private partners and finance is not a problem in regard to irrigation of agricultural products for export, but aspects outside of private sector control – political risk, changes in the regulatory environment, for example – act as disincentives for investors.

  If the NZ government is interested in encouraging private capital investments, local or international, it could usefully undertake a more detailed study to identify private sector aspirations and to determine if changes to the current investment environment are needed and acceptable to Government.

- The view of the Victorian Dept of Treasury is that PPP projects are most appropriate where long-run risks to the community are high, and technological innovations are likely to result in cost savings and timely delivery.

  The risks involved in large scale water enhancement projects are potentially considerable, and may be outside of the abilities of communities to manage. It would be appropriate for the NZ Government to categorize investment opportunities of interest on the basis of long term risk and prospects for cost savings as candidates for PPP.

7.3 PRIVATE SECTOR PERSPECTIVES

The investigation involved discussions with PPP stakeholders in the private sector. These comprised investment bankers and pension fund managers from the investment side, and professionals who provide services to them, as well as professional advisers to Government and communities on the other side of the investment equation.

Whilst some of these views are expressed in the section above about Government perspectives, there are other aspects that relate to the aspirations of the private sector itself.

- The private sector needs to be sure that the public or community partner is absolutely clear as to its requirements, which requires a comprehensive analysis of requirements in regard to service delivery and risk management on the part of the public or community partner.

  The knowledge and skills to successfully develop a potential proposal for PPP are not available in NZ. Experience with the main community groups involved in developing water enhancement projects indicates that a considerable amount of support is needed to allow them to participate strongly in any PPP arrangements.

- It was recommended by a number of private sector players that any PPP initiative in NZ in the first instance should be directed at pilot projects where the potential problems are judged ex ante to be lowest, and to learn from that experience. This was also the position taken in the investigations of PPP in Ireland.

  A possible response of Government to initiation of PPP for water enhancement projects in NZ would be to identify a suitable candidate pilot project and use this as a learning experience. This approach is also emphasised in reviews of PPP in other jurisdictions.

- The private sector is less comfortable if service delivery is dependent on management of facilities that it does not control.

  A typical example of an unsatisfactory situation is where a private sector operator is contracted to develop and operate a water treatment facility and distribution system, but

is dependent on a third party who controls raw water supplies. In the NZ rural water enhancement environment this would include situations where headworks – dams, diversions – were controlled by other parties, and the private sector was contracted to meet water demands downstream of source works. Local discussions revealed considerable concern about control of water sources passing to non-NZ interests.

- Investment analyses by the private sector under PPP consider the prospect of new customers and the arrangements and terms under which they are accommodated. Whilst this is a key issue for urban water supply connections, it is also of relevance to water enhancement for irrigation supplies.

  This will be an aspect that needs to be clear at the early stages of any PPP proposition. The situation has arisen in the Opuha and Waimakariri-Ashley Schemes and the responses taken are detailed in study 2 report.

- The private sector does not want to be used for public partners or communities to "test the market". The private sector will need prior assurances that the PPP will proceed if it proves to be more effective – with transparent measures of effectiveness – than traditional alternatives.

  This will require honesty and transparency in the PPP process; otherwise current interest of the private sector in NZ PPP opportunities will be lost, perhaps for the long term.

- The literature shows clearly that the private sector interest is enhanced and terms more favourable, if there is a developing portfolio of PPP opportunities.

  This will clearly be a problem in NZ where the level of infrastructure investment will always be less than larger economies. One response would be to identify a number of investment opportunities for study to see if a longer run activity may be developed.

In summary, private sector interest in PPP investment models in NZ will be enhanced if the investment environment is secure. Key issues in this regard are: (i) securing all necessary consents and approvals before PPP process is started; (ii) confidence that the investment is sheltered from political risk as far as is possible: (iii) early commitment of users and accompanying guarantees from Government to reduce financial risk; and (iv) control by the private sector of all the physical resources on which the service delivery depends.

8. Conclusions

Based on the foregoing, the following conclusions are drawn in respect to the relevance of international experience in funding large scale water enhancement projects in NZ:

- Large scale water infrastructure projects are funded by Governments under traditional D&C models in some developed economies and in many transition and developing economies.

- There is increasing use of a range of Private Public Partnership (PPP) funding models used in developed economies to provide core Government services.

- No completed examples of large scale water enhancement projects implemented under PPP were found, although the Deakin Irrigation project proposals in Victoria have been based on this model.

- There is a strong interest amongst private sector players to be involved in PPP projects in irrigated agriculture, so long as the investment climate is supportive. This particularly so for interests in Australia and traditional PPP players from other jurisdictions in Europe.

- The use of PPP is now being suggested as a mechanism for providing public sector infrastructure, specifically within the transport sector. The level of understanding in NZ of PPP is generally low and local experience inadequate to give confidence that lessons learned elsewhere have been taken into account.

- The role of Government in supporting and facilitating PPP in other jurisdictions involves interventions in the legislative and control environment, and substantial support in the early stages of the PPP process. In some EU countries, Government has taken a financial position in asset provision in situations where direct revenue steams were insufficient to support the investment, and total benefits justified the intervention.

- If the NZ Government was interested in creating an environment supportive of private sector interest in PPP developments of large scale water infrastructure projects there are several initiatives required:
  a) A more detailed analysis of private sector needs and constraints -- than has been possible under the resources available to this study.
  b) Investment opportunities suitable for PPP need to be identified.
  c) A commitment to pursue PPP implementation where appropriate.
  d) Identification of a pilot PPP project with minimal difficulties to gain experience.

- In all of the countries where PPP has become an increasingly important method of developing infrastructure projects, there has been policy decisions based on extensive analysis, and subsequent specific support and procedures developed by Government. In some cases legislative change has been necessary. It is an unresolved question as to whether such initiatives are appropriate in the NZ context.

Annex 1: List of Meetings and People Contacted

WEDNESDAY 30 JANUARY:

1. Price Waterhouse Coopers: Project Team financial advisers operating for client in BOOT delivery projects. Have worked with Peter Elliot.

   Mario D'Elia: Director, Financial Advisory Services, phone +61 3 8603 6799, 0407 946 648

   Darrin Grimsey: Director, Corporate Finance Recovery: +61 3 8603 3655, 0409 090 4046, 215 Spring St., Melbourne

2. Blake Dawson Waldron: Project team lawyers for client project team – involved with Peter Elliot and PWC.

   Joy Hooker: Special Counsel, phone: +61 3 9679 3426, 0419 429 281
   Geoff Daley: Partner Financial Services: +61 3 9679 3345, Level 39, 101 Collins St, Melbourne

THURSDAY 31 JANUARY:

3. CDL and Associates: Project delivery consultant, heavily involved in IIPV projects in social sector under previous Govt – looking to merge with Peter Elliot

   Craig Douglas: Director, phone: +61 3 9653 9304, 0419 434 458, Level 50, 101 Collins St., Melbourne

4. Industry Fund Services: Investment managers for superannuation funds focused on rural Victoria infrastructure projects.

   Peter Johnston: Investment Manager, phone +61 3 9657 4357, 0413 994 055, Level 29, 2 Lonsdale St., Melbourne

5. City West Water: One of three Melbourne Water Authorities, involved as a client of BOOT delivery of water supply projects.

   Mick Bourke: Managing Director, phone +61 3 9313 8700, 0419 353 513, St Albans Rd, Sunshine, Vic 3000

6. Gutteridge Haskins and Davey Pty Ltd: Engineering consultants servicing water supply projects under traditional and BOOT etc delivery mechanisms.

   Tom Fricke: Manager, Victoria, phone +61 3 9278 2252, 0417 057 442

   Roger Byrne: International Manager, Asset Management Group, phone +61 3 9278 2303, 0417 053 070, 380 Lonsdale St., Melbourne

FRIDAY 1 FEBRUARY:

7. Stakeholder Meeting Deakin Project at Mildura: Involved agencies with interest in the Deakin Irrigation Project. List of attendees below.

Ross Davies: Dept Natural Resources and Environment (DNRE), Water and Catchment Management Division, Manager "Water for Growth", Manager Sustainable Irrigation Development, phone +61 3 9412 4818, 0417 238 057, Level 1, 250 Victoria Pde, East Melbourne.

Peter Hammond: Chairman, First Mildura Irrigation Trust, +61 3 5023 4284, 0419 352 291

Bill Nicol: Consultant for Private Divertors from Murray River, Director, Nicol projects, phone +61 3 5023 1485, 0427 23 1485

Paula Gordon: Project Manager, Sustainable Agriculture Project. DNRE Mildura

John Cooke: DNRE, Manager Sunraysia District, phone +61 3 5022 4300, 0417 307 760, Fire Station Rd, Mildura

Don Rowe: Sunraysia Rural Water Authority, Manager Communications and Business Development, phone +61 3 5021 9772, 0419 513 494.

Glen Sutherland: Deakin Project Manager, DNRE, 0417 396 973

MONDAY 4 FEBRUARY:

8. Wspan Ltd: Project delivery services to private sector consortia providers – opposite end of agreement to Peter Elliot. Ex-Lend Lease.

   Rod Woodger: Consultant and Director, phone +61 3 9609 6000, 0419 815 536.

9. Wiltona Enterprises Ltd: Experience in earlier policy development under IIPV

   Tony Wilson: Director, phone +61 3 9580 0748, 0419 361 801, 91 Naples Rd., Mentone, Vic 3194

10. Dept of Treasury and Finance, Victorian Govt.

    Nick Tamburro: Assistant Director Projects, phone +61 3 9651 5295, 0409 970 053
    1 Treasury Place Melbourne (accompanied by Jason Loos)

11. ABN-AMRO: Investment Bankers

    John O'Rourke: Managing Director, Infrastructure Capital, phone +61 3 9612 1311, 0413 480 948, Level 27, 367 Collins St., Melbourne

TUESDAY 5 FEBRUARY:

12. Dept Primary Industries, Water Resources Division, Tasmanian Govt

    Jeff Gilmore: Project Manager, Water and Environment

    Pete McKay: Director, National Strategic Services Ltd, phone +61 3 6248 5139, 0419 515 615