ABSTRACT

The Integrated Rapid Public Transport Network interventions in 13 cities in South Africa came about as a result of a forward thinking public transport strategy being presented by Government in 2007. Since then, costs of both implementation and operation have been shown to be higher than expected. The future budgeted capital funding required to roll out the proposed public transport investments are in excess of the level of grant funding likely to be available from the national fiscus. Third party funding options need to be actively investigated and developed to augment the capital investment allocations provided through the national fiscus.

One such third party funding option is Public Private Partnerships in the development and operation of selected public transport infrastructure. This paper aims to reduce the mystique attached to Private Public Partnership (PPP) initiatives and seeks to link the use of PPP principles to the funding difficulties in IRPTNs.

The paper concludes that PPP’s may well be a viable source of funding for selected elements or components of the IRPTNs. This will however require interventions at a National level in order to reduce the administrative burden on each of the 13 involved cities.

1. INTRODUCTION

1.1. Background


To support this implementation, the National Department of Transport created a conditional grant to the priority municipalities, first called the Public Transport Infrastructure Fund (PTIF), then the Public Transport Infrastructure and Systems Grant (PTISG) and now the Public Transport Infrastructure Grant (PTIG) and the Public Transport Network Operations Grant (PTNOG). These two grants will again be merged into one grant with effect from the commencement of the 2015/2016
Municipal Financial Year, and will be known as the Public Transport Network Grant (PTNG).

Planning, establishment and rollout of the IRPTNs, has taken place over the last seven years to 2014. From a review of the annual submissions to National Department of Transport and National Treasury as part of the Grant allocation process, it is increasingly clear that even ignoring the post operationalisation funding, the basic costs of infrastructure development are far in excess of the available grant funding, or indeed on a unit cost basis, far higher than that which was anticipated during the initial planning stages. This is even before consideration is given to the costs associated with the compensation required to be paid in order to ensure the successful integration of the affected operators into the broader IRPTNs. The reader is reminded that the potential users of the IRPTNs are currently being transported by existing Mini-Bus Tax and Bus operators. These affected operators are offered compensation in order to effectively relinquish their existing businesses.

This situation is further exacerbated by the simultaneous desires of many of the affected cities to ensure a level of visible service at similar time periods over the next few years. The nature of IRPTN implementation is such that the initial costs of infrastructure development are at their peak in the two years before effective operationalisation.

The above leads to a significant request for funds from a limited grant, which grant is unlikely to increase at the deemed required rate over the short to medium term.

All affected cities thus need to consider alternative sources of funding for infrastructure development. One such source of funding is through private sector investment in public transport infrastructure, or PPPs.

Opportunities for third party funding will typically arise where an infrastructure element can generate an economic or financial return of some nature. By a careful analysis of all infrastructure elements, followed by a financial structuring exercise, it may be possible to reduce the current sole reliance on grant funding for infrastructure development.

As a general rule, investors are happy to invest as long as there is a reasonable return (i.e. demonstrable income stream) and the risks are known to them. The level of risk ultimately determines the price that investors require as a return, a fact which is often raised by detractors as a reason for ignoring external third party investment in government infrastructure. They would submit that third party investment will be more expensive than government funding. While this argument is typically correct, third party funding remains relevant where there is a capital funding constraint.

The lack of public transport infrastructure, caused by a lack of government funding, will in the medium term have a greater negative effect on the economy in general than a relatively marginal difference in the cost of funding. In other words, the socio-economic output deriving from the provision of superior public transport is always positive and therefore always relevant.
One opportunity may be to explore the use of Public Private Partnership principles. Whilst this is obviously not the only source of third party funding, the lack of knowledge and understanding as to the principles involved and the method of application often discourages even an initial assessment of PPP viability.

1.2. **Aim of the Paper**
This paper aims to reduce the mystique attached to PPP transactions and seeks to link the use of PPP principles as a possible funding option for IRPTNs.

1.3. **Scope**
The paper starts with a description of a typical PPP structure, followed by a précis of the applicable legislation.

The PPP process itself is then covered in some detail, followed by application of the PPP process to a selected example.

The conclusion includes some key recommendations designed to assist Municipalities to utilise PPP transactions, which will in turn reduce the burden on the Fiscus in the short to medium term.

2. **DESCRIPTING A PUBLIC PRIVATE PARTNERSHIP**

2.1. **What is a PPP?**
A PPP can generally be described as an agreement between a public sector entity (entity) and a private sector institution (private party). In terms of the agreement, the private party assumes some substantial financial, construction, technical and operational risks in the design, financing, building and operation of a project. (Accounting Standards Board, November 2008).

An example of a typical PPP agreement and process is shown at Figure 1 below.

![Figure 1: Typical Design, Build, Finance, Operate PPP transaction](image-url)
• The Private Party supplies an asset that was previously supplied, developed, and operated by a Public Sector Entity.
• The Private Party and the Entity enter into a service level agreement relating to the use, management and expected output of the asset.
• This agreement will often have minimum required standards and make provision for penalties in respect of inadequate service delivery.
• The agreement will have a finite tenure, and in many cases, the asset in question may well revert to ownership by the Government at the expiry of the service level agreement.
• Whilst not shown in Figure 1 above, there may well be a partial payment from the user in respect of the service delivered, with a subsidy being provided by the Public Sector Entity to make up any commercial operational shortfalls.
• For the sake of this paper, a PPP is thus a commercial transaction between a private entity and a municipality or city implementing a transport solution of some form or other. This commercial transaction requires that;
  • The private party would perform a municipal function for and on behalf of a municipality, or
  • Acquires the management or use of municipal property for its own commercial use; or
  • Any combination of the above, and
  • The private party would take on substantial financial, technical and operational risk, as a result of the above actions, and
  • The private party receives a benefit from the above, which benefit may be derived from the municipality, from the user, or from a combination of these.
• A private party in a PPP can never include a municipality, a municipal entity, or any other organ of State. A private party may be a non-governmental organisation or a community body, but they must have the capacity to accept and manage financial, technical and operational risk (National Treasury / Dept Prov and Local Government, 2007).

2.2. What is not a PPP?
There is often misconception regarding particular transactions involving private and public sector entities. The distinction is important because the guidelines and regulations only apply to PPPs.

PPPs are not;
• Outsourcing of functions where substantial financial, operational and technical risk is maintained by the municipality,
• A donation by a private sector entity,
• A privatisation or sale of municipal assets or liabilities,
• The commercialisation of a municipal function by the creation of a municipal entity.
• Borrowing in the normal course of business by a municipality is also not a PPP, because although a lender takes on significant financial risk, the taking on of the risk is not as a result of the delivery of a municipal service.
3. MUNICIPAL SERVICE DELIVERY AND PPP GUIDELINES

South Africa has an established regulatory framework that enables municipal, provincial and national government institutions to enter into PPP transactions. In the specific case of Municipalities, National Treasury and the Department of Provincial and Local Government issued the Municipal Service Delivery and PPP Guidelines in 2007 (National Treasury / Dept Prov and Local Government, 2007). These Guidelines were issued taking into consideration the specific requirements relating to PPP’s as embodied in the;

- Municipal Finance Management Act, Act 56 of 2003 (MFMA),
- Municipal Supply Chain Management Regulations, and

The implementation of a decision to employ any external service delivery mechanism, including a PPP, requires a municipality to complete a feasibility study according to provisions of the MFMA and, in cases involving municipal services, the MSA. The Guidelines combine in one document the requirements of the two Acts, attempting to make it easier to ensure that the provisions of both the Acts are sufficiently covered, when entering into a PPP. The Guidelines, as the name suggests, also give guidance where particular elements are not covered by either Act.

4. THE PPP PROCESS

The regulations are broken down into modules, with these modules being embodied within four distinct areas of the so-called Municipal PPP Project Cycle. All references hereafter are taken from the Regulations (National Treasury / Dept Prov and Local Government, 2007)

The Project Cycle is shown at Figure 2 below, with commentary and explanation following. It is specifically noted that this paper is not intended to provide the reader with a full explanation of the PPP regulations, but will rather concentrate on those areas that may ultimately influence or affect the Municipality’s ability to implement a PPP.

As noted earlier, a PPP cannot proceed until the requirements of specifically Section 78 of the MSA have been addressed.

On the assumption that the Section 78 process results in an “external mechanism” recommendation, then a PPP can be considered.
4.1. The Inception Stage
After initial identification of the project, and notification to National Treasury and the Department of Local and Provincial Government (DPLG), now known as the Department of Cooperative Governance and Traditional Affairs (CoGTA) as to the intention to undertake a PPP, the first step is the appointment of a Project Officer. This person may be internal or external to the Municipality. Reference must also be made in the initial notifications to the available expertise in the Municipality to undertake the PPP in question.

Treasury may at this stage insist upon the appointment of an appropriate advisor to the transaction.

4.2. The Feasibility Study
Once the advisor is appointed, a feasibility study will be called for by the accounting officer. This feasibility study has to link the objectives of the municipality to the strategic and operational benefits arising out of the PPP.

The feasibility study is expected to cover (as a minimum) the following:

- The details of the private party’s role in the PPP, as well as the method by which significant technical, financial and operational risk is transferred.
- The required legal and technical ability of the future private party to perform this role.
- Description of the proposed agreement with specific emphasis on how the transaction provides a value for money solution to the municipality; whilst also discussing the ability of the municipality to afford the transaction.
- The impact on the Municipality’s current and future budgets.
- The capacity of the Municipality to monitor, manage and enforce the agreement.
• Once completed, the feasibility study report is presented to National Treasury, as well as the Provincial Treasury of the Province in which the Municipality resides. This is done so as to give these two Treasuries an opportunity to consider the report, and present any comment or recommendations thereto.

At the same time, the feasibility study report is subjected to public scrutiny and participation.

A minimum of 60 days after the commencement of the above interventions the accounting officer presents the report to Municipal Council, for a decision “in principle” to continue with the proposed PPP.

Affordability, value for money and risk transfer are the three tests that are applied for evaluation throughout the PPP process.

4.3. Procurement
Assuming that the public participation process and the recommendation therefrom are considered by Council, and that Council approves the PPP “in principle” the next step would be procurement.

Procurement is undertaken in terms of the Municipality’s Supply Chain Management Policy and Processes.

Prior to issuing the bids, the two Treasuries must be given an opportunity to submit their views and recommendations.

The bid will then be issued and evaluated in terms of the Municipality’s laid down supply chain management procedures. After the evaluation, but before the preferred bidder is appointed, the accounting officer must again solicit the views and recommendations of the National Treasury and the relevant Provincial Treasury.

Specifically the views and recommendations being sought relate to:
• The proposed terms and conditions of the PPP agreement,
• The preferred bidder’s competency to enter into and capacity to deliver in terms of the PPP agreement, and
• The Municipality’s plan relating to the on-going management of the agreement.
• The appointment of the preferred bidder can then be made, but this involves a public participation process as well as one more occasion at which the views and recommendations of the two Treasuries must be sought and considered. The public participation process and the intervention of the two Treasuries arises at the point that the agreement is in its final format, and all the terms have been essentially agreed between the Municipality and the private entity.

The Council of the Municipality will then be required to take account of all previous processes, recommendations and views, and authorise the execution of the PPP Agreement.
The PPP now enters the contract management stage. It is also important to highlight at this stage that the above process can take as long as three years from inception to contract management.

4.4. Contract Management
Municipalities have a legislative responsibility to ensure that they are able to properly implement, manage, enforce, monitor and report on any contract or agreement entered into on an ongoing basis.
No Municipality may enter into any contract which it does not have the capacity to monitor and manage.

5. APPLICATION WITHIN THE IRPTNs – A THEORETICAL EXAMPLE

In order for a PPP to be acceptable to all parties, there has to be a substantial transfer of financial, technical and operational risk to the Private Party.

- Financial risk can normally be translated as that risk which attaches to the borrowing of money.
- Technical risk is that risk that the item, facility or service being developed does not meet the requirements for which it is built.
- Operational risk is the risk which arises in the event that any facility or service is mismanaged. Management at an acceptable level from a team with the required skills limits the ultimate operational risk.
- One infrastructure element where all three of the above risks are present is the construction and subsequent operation of the Bus Depot for the use by the IRPTN vehicles. This asset is thus chosen for use in this example.

5.1. The Bus Depot

The depot is a facility which needs to offer various services to the bus fleet, including:

- Office space for the bus operations company,
- Fleet parking,
- Driver and other staff parking,
- Fleet refuelling facilities,
- Fleet cleaning facilities,
- Fleets repairs and maintenance facilities, and
- Possible staff comforts, including cafeterias, gyms, and pause and relaxation areas for the drivers and other staff.

A bus depot in the South African context is also likely to support a fleet of 100 to 400 buses per facility. Taking the size of the facility and the multitude of different requirements into consideration, it is noted that the ownership and landlord based facility maintenance of a bus depot is a specialist task, which requires a high level of technical and operational ability.

Depots also require a large amount of land, simply because of the requirement to be able to park and maintain the buses in a single location. IRPTNs are generally being
introduced in developed parts of the country, and as such the availability of land is often restricted to land that is already owned by the government.

Depots are also relatively costly to construct. For the sake of this exercise, a per depot cost of R 250M is assumed. Once built, a depot can be safely assumed to have an expected life of at least 25 years (and even realistically up to 40 years), as long as it is maintained on an on-going basis.

Using the assumptions noted, and summarised at Figure 3 below, the comparability between various funding options is shown in the next section.

### 5.2. The Funding Options

<table>
<thead>
<tr>
<th>Details</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed cost of land</td>
<td>Nil – provided by Government</td>
</tr>
<tr>
<td>Assumed cost of depot construction</td>
<td>R 250,000,000</td>
</tr>
<tr>
<td>Assumed life of the depot</td>
<td>20 years</td>
</tr>
<tr>
<td>Risk free rate of return</td>
<td>Currently 7.2%, using the RSA 10yr bond rate as a proxy</td>
</tr>
<tr>
<td>Average risk free rate: 1997 to 2015</td>
<td>10.2%</td>
</tr>
<tr>
<td>Return required by an investor</td>
<td>20.0% per annum</td>
</tr>
<tr>
<td>Municipal interest rate</td>
<td>9.0%</td>
</tr>
<tr>
<td>Intended start of operations</td>
<td>2 years hence</td>
</tr>
<tr>
<td>Construction period for depot</td>
<td>2 years</td>
</tr>
<tr>
<td>PPP agreement term</td>
<td>12 years post operations</td>
</tr>
<tr>
<td>Maintenance charge per annum</td>
<td>2%</td>
</tr>
<tr>
<td>Insurance charge per annum</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

**Figure 3: Funding Assumptions Applied**
The output of the funding options as represented in Figure 4 above provides some intuitive as well as some possibly unexpected results. It is stressed that this is a theoretical modelling exercise, and one which would have to be tested by taking a specific feasibility study through a process of procurement.

What is however shown through the modelling exercise, and what can be expected is the following:

- An investor is able to make a positive return on an initial investment of R 250M, when that investor has a capital return effectively guaranteed over the 12 years post commencement of operations. This was tested at a before tax return on initial investment of 20% per annum fixed, 15% per annum fixed and at 12% on the initial investment escalating by 5% per annum.
- In all three the above cases, the investor would have to maintain the asset and provide for full comprehensive insurance.
- Looking at funding at the Municipal level itself, grant funding is the cheapest funding option for the municipality, followed by own municipal funding over 10 years.
- What was less expected, and therefore less intuitive was the following:
  - The NPV of the 20% investor return to the Municipality, discounted at a risk free rate of 7%, was the most expensive, but the difference is less than R 90M in current value terms to the grant funding option.
  - At 15% to the investor, the effective cost to the Municipality gets very close to the same current value cost of grant funding, however instead of having to finance the asset with a lump sum upfront payment, the Municipality is able to spread the financing over a longer period. This reduces the immediate pressure on National Grant funding and allows the implementation of infrastructure assets over a shorter period.
  - In summary thus, there exists an opportunity to spread a current requirement for funding across a period which equals the initial term of the bus operations
contracts, and the real cost to the Municipality in current value terms can be the same or similar.

- Any financial modelling is always open to “assumption questioning” and in particular, the risk free rate used in NPV calculations is not the same for all participants. That noted, the ability to reduce cost by entering into bulk purchase agreements must also be taken to account. This is expanded upon in the recommendations noted below.

6. RECOMMENDATIONS AND CONCLUSION

The IRPTNs cannot continue to rely solely on grant and municipal own funding to provide the required infrastructure to support operations at the level of service required by the NDoT. Alternative funding sources must be investigated and utilised to the fullest extent possible.

Based on the limited number of successful PPP’s at Municipal level, it is submitted that they are not usually investigated to the fullest extent possible, often because the capacity of a municipality to perform as per the guidelines, even with the support of advisors, may be limited.

However, PPP’s are acceptable for any assets within the IRPTN where a commercial return could be generated, but at a cost which is not significantly more than the municipal own cost of providing that facility or service.

PPP’s are however time consuming to institute, and even with the best intentions on all parties’ sides, the process is likely to take between 2 to 3 years to complete. Perhaps where the country has (potentially) 13 cities going through the same process of instituting integrated public transport systems, the following recommendations would help to alleviate the administrative issues, and provide a source of additional funding to the IRPTNs.

- Identify at National Level those elements of the IRPTN that could be financed using the PPP Methodology.
- Development by the PPP Unit of National Treasury of a uniform PPP approach for these particular elements.
- Development of a National and collective bid procedure.
- Development of standardised legal documentation for these elements.
- Investigation at National level of potential donors or developmental financial institutions that may wish to partner National and Local Government in this initiative.
7. REFERENCES

