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Comparison of Indian PPP Construction Industry and European PPP Construction Industry: Process, Thresholds and Implementation

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Comparison of Indian PPP Construction Industry and European PPP Construction Industry: Process, Thresholds and Implementation.

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Abstract

Since the 1990’s, there has been a rapid rise of Public Private Partnerships (PPPs) across the world. Governments in developing as well as developed countries are increasingly using this procurement method to bridge the much needed infrastructure gap. PPPs are seen as an important tool for producing an accelerated and larger pipeline of infrastructure investments, and catching up with the infrastructure deficit. Arguably, this is why developed and especially developing countries are very keen on PPP models. This paper will compare the PPP procurement process followed in Europe compared to India and presents a thorough review of literature on governance issues, the process, thresholds and choices that the Indian construction industry faces in grappling with this procurement route, together with the associated challenges. The methodology used is a combination of reviewing documentation available/produced to date with a combination of comparison carried out based on Social, Legal, Economical, Environmental, Political, and Technological (SLEEPT). Consideration is also given to the different PPP models used for different sectors in Europe and in India. The paper argues and concludes that the challenges that confront the construction industry in India are multifaceted and likely to impact on the implementation of the PPP model if a strict governance regime is not followed in terms of process, thresholds and implementation.

Keywords: PPP, PPP construction industry (European and India), Governance, Process, and Implementation

1. Introduction

Over the past 15yrs governments have been struggling to achieve economic development and competitiveness through improving their basic infrastructure. PPP is rapidly becoming the preferred method for public procurement for delivering both transport and social infrastructure projects throughout the world, thus gaining importance as a vehicle to finance much-needed public infrastructure across the globe. PPPs are confused with privatization. PPPs are not privatization (UNECE 2008), as under PPPs accountability for the delivery of the public service
is retained by the public sector whereas under privatization, accountability moves across to the private sector.

The current global economic downturn is also effecting the PPPs. Reduced availability of loans to private investors and PPP projects along with altered risk consideration of banks and investors has increased the cost of loans. The temporary slowing down of demand growth due to higher costs for PPPs has increased pressure on price and margins, along with project selectivity. Successful PPPs require an effective legislative and control framework and it is highly recommended (UNICEF, 2009) that each partner recognize the objectives and needs of the other more minutely in the present economic scenario, along with highlighting the fact that PPPs are still in their infancy in most countries. It is argued that lack of processes, procedures and enabling institutions, i.e. Governance, is the main barrier to extending their use (UNECE, 2008).

2. PPP Concept

PPP is a generic term for the relationship formed between the private sector and public bodies often with the aim of introducing private sector resources and expertise in order to help provide and deliver public sector assets and services. PPP projects are based on the assumption that both sectors have particular skills and characteristics providing each with advantages in undertaking certain tasks. Quite naturally this has created a widespread interest in the term PPP and it has become quite fashionable, both politically and socially. Much is being claimed in the press and in public debate as to the inherent benefits of PPP. Attaining the means to accomplish this has resulted in alternative sources of finance being sought, as well as ways of making public sector services more cost effective (CIC, 2000). PPP arrangements come in many forms and are still an evolving concept which must be adapted to the individual needs and characteristics of each project and project partners. As a result, there are various types of PPPs, established for different reasons, across a wide range of market segments, reflecting the different needs of governments for infrastructure services. Although the types vary, two broad categories of PPPs can be identified: firstly, the institutionalized kind that refers to all forms of joint ventures between public and private stakeholders and secondly, contractual PPPs.

The most common PPP models are Design-Build (DB), Design-Build-Maintain (DBM), Design-Build-Operate (DBO) or Build-Transfer-Operate (BTO), Design-Build-Operate-Maintain (DBOM) also known as Build-Operate-Transfer (BOT), Build-Own-Operate-Transfer (BOOT), Build-Own-Operate (BOO) and Build-Own-Operate/Maintain (DBFO, DBFM or DBFO/M). PPPs can also be used for existing services and facilities in addition to new ones. Some of these models are Service Contracts, Management Contracts, Lease, Concession and Divestiture (Deloitte 2006).

Globally, PPPs have played a central role in answering the pressing need for new infrastructure development especially in the transportation sector i.e. roads, tunnels, bridges, airports, ships, railways, and other forms of transportation. Thus transportation is the largest sector
implementing the PPP model in the world. Factors that make most transportation infrastructure ideal for PPPs are firstly, the strong emphasis on the role of cost and efficiency helps to align private and public interests and secondly, the growing public acceptance in many countries of associated user fees for assets such as roads and bridges which makes private financing easier in this sector. The ability to limit participation to paying customers, in the form of train tickets or bridge tolls, ensures a revenue stream that can offset all or some of the cost of provision in many countries, a format readily understood by the private sector. The scale and long-term nature of these projects are well served by PPPs.

Table 1: PPP models used in various sectors in different countries (Adapted Deloitte, 2006)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Country</th>
<th>PPP models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>Australia, Canada, France, Greece, Ireland, Italy, New Zealand, Spain, UK, US, India</td>
<td>DBOM, BOOT, Divestiture</td>
</tr>
<tr>
<td>Water, wastewater, and waste</td>
<td>Australia, France, Ireland, UK, US, Canada, India</td>
<td>DB, DBO, BOOT, Divestiture</td>
</tr>
<tr>
<td>Education</td>
<td>Australia, Netherlands, UK, Ireland, India</td>
<td>DB, DBO, DBOM, BOOT, DBFO/M, integrator</td>
</tr>
<tr>
<td>Housing/Urban Regeneration</td>
<td>Netherlands, UK, Ireland</td>
<td>DBFM, joint venture</td>
</tr>
<tr>
<td>Hospitals</td>
<td>Australia, Canada, Portugal, South Africa, UK</td>
<td>BOO, BOOT, integrator</td>
</tr>
<tr>
<td>Defence</td>
<td>Australia, Germany, UK, US</td>
<td>DBOM, BOO, BOOT, alliance, joint venture</td>
</tr>
<tr>
<td>Prisons</td>
<td>Australia, France, Germany, UK, US</td>
<td>DB, DBO, BOO, management contract</td>
</tr>
</tbody>
</table>

Europe: The infrastructure needs for the European Union run into trillions of dollars. The energy sector alone requires $1.2 trillion over the next 20 years. Approximately $90 billion is needed annually for infrastructure investment in Germany alone (IFSL, 2009).

India: “The most glaring deficit in India is the infrastructure deficit.” The importance of infrastructure for rapid economic development in India cannot be overstated. India spends just 6 % of its GDP on infrastructure. To achieve its targeted GDP growth rates, the country will need to invest approximately $250 billion in infrastructure over the next five years (DEA, 2008c).
3. PPPs in Europe:

Europe in 2008 saw the intensification of the credit crunch and the severe economic downturn presented challenges in all sectors of the economy that rely on private finance. The downturn led to delays to projects and 2009 is set to be one of the most challenging ever for the PPP industry. However in Europe we can still see PPP projects coming to financial close. The PPP market in Europe was growing in size over the last two decades and in 2005-06 the PPP market increased in size by 37% (Piper, 2007). This was due to more countries in Europe launching projects and putting projects through tender. High growth is expected in rail, waste and water, healthcare and defence sectors. In 2006 the tender value of PPP projects has more than doubled since May 2004 and is around €54 billion according to the fourth annual report (Piper, 2007).

Table 2 shows the top ten countries ranked in order of the capital value of the projects from 2001-08. On top is the UK followed by Spain and France.

Table 2 – PPP in Europe, value of signed contracts (IFSL, 2009)

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>Capital value of projects € million</th>
<th>No. of signed deals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UK</td>
<td>61131</td>
<td>536</td>
</tr>
<tr>
<td>2</td>
<td>Spain</td>
<td>4127</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>France</td>
<td>4093</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>Italy</td>
<td>3563</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Republic of Ireland</td>
<td>3253</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>Greece</td>
<td>2398</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Germany</td>
<td>2029</td>
<td>40</td>
</tr>
<tr>
<td>8</td>
<td>Belgium</td>
<td>1780</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Netherlands</td>
<td>1733</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>Poland</td>
<td>1520</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Austria</td>
<td>899</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>Finland</td>
<td>700</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Bulgaria</td>
<td>654</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>Hungary</td>
<td>556</td>
<td>11</td>
</tr>
<tr>
<td>15</td>
<td>Cyprus</td>
<td>500</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Portugal</td>
<td>450</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>Other countries</td>
<td>977</td>
<td>7</td>
</tr>
</tbody>
</table>

PPP projects have been launched across a wide range of sectors in Europe. Roads are by far the most dominant sector, assisted by the fact that the concession model has a long and successful history within Europe, particularly in southern European countries (City & Financial, 2008). In
recent times apart from the road, bridge and tunnel infrastructure projects there is an increasing
demand for hospitals, with a real health infrastructure market in Europe with projects in Italy,
Spain, Portugal, France, Germany, Czech Republic and the UK. Rail also represents 15% by
tender value of the market which consists mostly of light rail projects. The infrastructure for
heavy rail has been delivered using a PPP model in only a few cases such as the Perpignan to
Figueras cross border rail link. The scale and politics of such projects make them difficult to
deliver. However, there are several big schemes currently in development for high speed links
in Portugal, Austria and the Netherlands (Piper, 2007).

Table 3 – Sector wise Pre-tender projects in Europe (Piper, 2007)

<table>
<thead>
<tr>
<th>Sector</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridges/Tunnels/Roads</td>
<td>60</td>
</tr>
<tr>
<td>Rail/Light rail</td>
<td>22</td>
</tr>
<tr>
<td>Defence</td>
<td>4</td>
</tr>
<tr>
<td>Healthcare</td>
<td>4</td>
</tr>
<tr>
<td>Sports /leisure/tourism</td>
<td>3</td>
</tr>
<tr>
<td>Airports</td>
<td>2</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
</tr>
<tr>
<td>Waste/Water</td>
<td>2</td>
</tr>
<tr>
<td>Prisons</td>
<td>1</td>
</tr>
<tr>
<td>Maritime/ports</td>
<td>1</td>
</tr>
<tr>
<td>Regeneration</td>
<td>1</td>
</tr>
</tbody>
</table>

The European markets are evolving rapidly with the transfer of know how both on the public
and private sector sides (IFSL, 2009). This does not mean that all projects are structured in the
same way across sectors and borders - governments are developing structures which suit their
own environment - being everything from the legal framework, public expectations through to
commercial practice. The momentum behind PPP as a globally accepted form of infrastructure
and public service procurement by government has far exceeded expectations. There is a flow
of ideas and know-how from the European markets to America, Asia and Africa (Deloitte,
2006). There is concern that an overheated market may lead to less rigorous evaluation of
projects and less well defined deals which may deliver short term benefits, in terms of
completed projects, but in the long run will devalue the currency of PPP. Thus parties involved
in the PPP process should follow a strict corporate governance of projects to ensure a
sustainable market (IFSL, 2009). The need for maintaining transparency in the entire PPP
project cycle and stakeholder interactions has been highlighted as a key factor in determining
the success of PPPs. The private sector has urged the government and other public sector project
sponsors to be cautious of the ‘selection by nomination’ procedure, which is not the same as
transparently awarded PPP contracts (UNECE, 2008).
4. PPPs in India:

The evolution of the Indian Construction Industry was almost similar to the construction industry evolution in other countries: founded by Government and slowly taken over by enterprises. After independence the need for industrial and infrastructural developments in India laid the foundation stone of construction. The period from 1950 to the mid 60’s witnessed the government playing an active role in the development of these services. With the present emphasis on creating physical infrastructure, massive investment was required, thus in the late 1960s the government started encouraging foreign collaborations in these services. The objective of such an imposition was to develop local design capabilities parallel with the inflow of imported technology and skills. This measure encouraged international construction and consultancy organisations to set up joint ventures and register their presence in India through public-private partnerships and mechanisms like Build-Operate-Transfer (BOT). As the infrastructure requirement was of an immense magnitude, budgetary sources could not raise the necessary scale of resources. The PPP approach was explored and was considered best suited for finding the required level of resources.

Currently 86 PPP projects have been awarded in India (ADB, 2008). Roads and port sectors have dominated the number and size of PPPs. Public authorities have identified a whole range of sectors for PPP, including roads/highways, ports (air, sea, container), telecommunication, water supply, waste management, tourism, power, industrial infrastructure, township development, leisure, and health. Many of the projects are already in the bidding stage using both memorandum of understanding (MOU) and competitive bidding procedures (PPIAF, 2008).

It is estimated that US$ 320 billion investment (at 2005/06 prices) is required for 2007-12 in India with major expenditure on the power sector followed by the railways. Furthermore, the Government itself envisages that the investment in infrastructure would rise gradually from 4.7 % of GDP in 2005/06 to 8 % by 2011/12. This translates to an investment of US$ 384 billion (at 2005/06 prices), assuming that the real GDP grows at 9 % per annum and annual inflation remains at 5 % (DEA, 2008).

Table 4 – Sector-wise figures of total no. of projects along with sector wise investment required (DEA, 2008).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total no. of projects</th>
<th>Investment required US $ billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>32</td>
<td>130</td>
</tr>
<tr>
<td>Railways</td>
<td>3</td>
<td>66</td>
</tr>
<tr>
<td>National Highways/roads</td>
<td>186</td>
<td>49</td>
</tr>
<tr>
<td>Civil aviation</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Ports</td>
<td>38</td>
<td>11</td>
</tr>
</tbody>
</table>
It is evident from the tables above that the road sector dominates in terms of the number of projects, accounting for 62% of total projects. Ports come second in terms of the number of projects, i.e., 13%, which is 32% in terms of value. It is noteworthy that if ports and central road projects are excluded from the total, there is in fact a relatively small value of deal flow. The potential use of PPPs in e-governance, health and education sectors remains largely untapped across India as a whole, though of late there have been some activities shaping in these sectors. Another addition to the database is the energy sector which indicates 32 projects. Out of the 32 projects in the energy sector, 28 of them are hydro based power projects on a BOOT basis. In terms of main types of PPP contracts, almost all contracts have been of the BOT/BOOT type (either toll or annuity payment models) or close variants. In terms of approach to provider selection, almost all the projects (in the sample data available for 300 projects) were competitively bid (either national or international competitive bidding) with the negotiated ones (through MOUs) primarily accounted for by railway and ports sector (DEA, 2008).

5. Governance:

Governance in PPPs is open to much interpretation. Governance refers to the processes in government actions and how things are implemented. It also relates to the quality of institutions and their effectiveness in translating policy into successful implementation (UNECE, 2008).

Good governance is important on PPP projects at all stages of its development. Good governance requires that there is participation from all involved stakeholders. Many PPPs have failed owing to strong opposition from civil society, local media, and other stakeholders. Public opposition has led to many cancellations, both before and after the concession award. Alienation of actual users of the asset and lack of public support have increased project costs, delayed project completion, and ultimately jeopardized the sustainability of public services. Lack of communication and poor stakeholder management could become deal-breakers. A predominant reason for this is lack of effective communication with the principal stakeholders of the project. It is important for the project sponsors to disseminate information among the various stakeholder groups about the virtues of partnership options and convince them about the benefits that would accrue to them. Feedback and consultations with the stakeholders will ensure support, client focus, and improved coordination of the project. It is also observed that the degree to which the formation and stewardship of the rules is undertaken without harming or causing grievance to people will populate decency. It will also provide transparency within the PPP process with a degree of clarity and openness with which decisions are made leading to accountability to which political actors are responsible to society for what they say and do (UNECE, 2008). This would bring in a culture of fairness, demonstrating that rules apply equally to everyone in society and bring efficiency which is not limited to human and financial resources and is applied without waste, delay or corruption or without prejudicing future
generations. If governments executing PPPs make a conscious effect in implementing good governance then it can lead to economic development (Deloitte, 2006).

6. Process:

The PPP process followed in India is based moreover on the same principles as are followed in Europe. There are three main stages in a PPP project (UNECE, 2008), firstly project preparation and development, secondly the bidding phase and thirdly the implementation and operating phase. According to Deloitte, 2006, India along with many other countries are still evolving in the PPP model including designing the partnership policy and legislative framework, getting the procurements and contracts right and building the marketplace by encouraging the private sector to bid on these kinds of contracts. India could benefit and learn from the lessons learned: in the United Kingdom for schools, hospitals and defence facilities; in Australia and Ireland for roads; and in the Netherlands for social housing and urban regeneration. India can learn and avoid some of the mistakes made, such as the tendency to apply a one-size-fits-all model to all infrastructure projects and they can adopt from the outset some of the more flexible, creative and tailored PPP approaches. A PPP programme becomes significant only when a fully comprehensive system is established along with political will and commitment (UNECE, 2008).

7. SLEEPT: Comparison of Implementation of PPPs in Europe to India

SLEEPT methodology is used to compare the complexities of implementing PPP projects in Europe to India. The six components of SLEEPT are as follows (CI, 2007):

- **Social**: Public acceptance of private sector involvement.
- **Legal framework**: Standardised documentation.
- **Economic**: Access to significant private sector borrowing.
- **Environment**: Clearly defined sustainability and impact criteria.
- **Political framework**: International, national and local will or commitment.
- **Technological**: Access and availability of quality PPP practitioners and experienced project sponsors.

7.1 Social:

Public opposition has led to many cancellations, both before and after the concession award (UNECE, 2008). The social and cultural norms within a nation can significantly alter the behaviours of people, ultimately affecting the operation of systems and structures in place. The complex nature of the PPP procurement along with a vast documentation requirement was putting a lot of pressure on the implementing authority. Because of their complexity they were also confused with privatisation and thus not readily accepted in some countries.
Governments implementing PPPs need to be abundantly clear and determined about the basic motivation and objectives for opting for PPPs. In the developed and developing countries the vast infrastructure deficit which is difficult to procure by means of state funds is eminent, thus making a case for the PPP’s. While resource constraints and maximizing government revenue are legitimate motivators, they should be driven much more by the core drivers of effectiveness gains such as improved service standards and customer satisfaction along with efficiency gains such as value for money and improved service at optimal costs (EC 2004).

In Europe the acceptance of private finance in public services was slow but took momentum in the early 1960’s with toll highways in Spain (EC, 2003). However, today Europe is implementing the PPP model in all the sectors. In India the PPP model took off slowly as it was confused with privatization. The PPP model was used in the transportation sector but the acceptance of this model was slow due to bureaucracy and red tape. To date there are certain sectors still untapped due to public opposition, budgetary constraints and a lack of know-how of the subject (DEA, 2008).

7.2 Legal framework:

PPPs need to have detailed policy to in still confidence and attract the participation of private investors and commercial lenders. PPPs can succeed only if they are structured and planned in detail and are managed by expert dedicated teams - preferably, a single, centralized unit servicing as a ‘one-stop’ shop for investors and a nodal point for facilitating co-operation among the different government agencies. Governments also need to use technical, legal and financial advisors, where needed, to match the advantages of the private sector, particularly in large-scale programs.

In Europe, if a PPP model is to be implemented then all EU member states are obliged to adhere to the relevant EU legislation. A Central PPP unit has been established by the EC. This unit will help in setting up the national PPP units for the implementation of identified PPP projects by providing the expertise and knowledge on PPP projects (City & Financial, 2008).

In Europe, all the EU member states have their own national legal systems and procurement guidelines. The original PPP philosophy had originated within the UK common law legal system. Translating that common law approach to other legal systems has inherent difficulties. In some nations issues that would appear to be pre-determined can unravel as disputes move away from the site and into the courts. A further legal difficulty within PPP is the requirement for the settlement of contractual disputes. Given the variations in the formats, bidding procedures, agreements, and overall execution of PPPs among the various local bodies/agencies, the private sector has highlighted the need for standardized prequalification and bidding procedures and guidelines for ensuring efficiency, predictability, and ease of the approval process. A significant difference in the national legal approaches is the consideration of the intended longevity of relationships. In Europe the approach is broadly that each PPP contract should be treated independently as a one-off agreement. In India there is more
consideration of a longer term effect of continued development together (a form of partnering
expectations) beyond a single PPP project.

The Indian authorities are making conscious efforts in setting up PPP cells at state level to
access project development resources; advisory support on infrastructure legislation and
regulatory frameworks and detailed PPP policies along with the methodology to deal with PPP
projects. To expedite the process, the government authorities have also called for the
streamlining of the statutory clearances on environment, defence, airport authority, land
acquisition, etc (DEA, 2008a). In India government authorities need to pay more attention to
subsequent potential renegotiation. Lessons should be learned from the cases in Latin America
where over 60% of 1,000 concession contracts awarded in the 1990s were renegotiated within
three years. Bidders often offer below-cost prices to win the contract in anticipation of later
renegotiation. A concession agreement should cover all possible causes of later adjustments,
leaving minimum room for renegotiation. In the Worli Sealink project in Mumbai, the project
consultants were replaced midway through the construction phase. The new consultants
suggested a change in project design that resulted in escalating the project cost multi-fold
causing further project delays. Thus India needs to develop an appropriate legislative framework
for PPPs, clarification of entry conditions, suitable contractual structures, and clarification of
incentives and concessions (RASTOGI A; KALRA P; PANDEY A, 2008).

7.3 Economic:

Effective PPP models will have to make economic sense to the parties involved for their
success. Thus it has to devolve sensibly the roles and fair sharing of responsibilities, costs, and
risks between the public and private sectors. Project development needs to be done by
government, for which it needs to create dedicated funds. These funds would help create a
pipeline of bankable projects. PPP projects often raise debt funding on a limited-recourse
project finance basis. This means that the lenders rely merely on project assets and cash flows
and do not have recourse to the project sponsors. Debt finance usually represents 60–80% of the
financing structure. Therefore, PPP design and documentation should provide adequate
protection to debt service against non-commercial risks related to force majeure, regulatory
changes, contract termination, etc. Risk is assigned to the partner best able to manage it.
Commercial risk is better borne by the private sector partner, while regulatory risk is better
borne by government agencies. Well-prepared projects reduce the cost of bids and attract more
bidders in a public tender. The management style applied to European PPP projects is
commercially oriented. The projects are commercial self-contained cost centres. The typical
special purpose vehicle (SPV) – concession holder may place the construction and operational
contracts with a subsidiary in exactly the same way that they would treat any other contractor.

The European International Bank (EIB) is the EU’s financing institution and was established to
provide long-term finance for projects in support of EU policy objectives. In this way the bank
contributes towards the development of a closer-knit Europe in terms of economic integration
and greater economic and social cohesion. Accounting and statistical rules relating to PPP’s
have also continued to cause uncertainty for EU member states with the obligation to comply with the Maastricht criteria. In this regard, Eurostat adopted a decision on 11th February 2004 on the deficit and debt treatment of PPP’s. Eurostat states that the assets involved in a PPP may be classified as non-governmental assets, and therefore recorded off the government’s balance sheet if the following conditions are met. Firstly, the private partner bears the construction risk and secondly the private partner bears at least one of either availability or demand risk (City & Financial, 2008).

India was under socialist-based policies for an entire generation from the 1950s until the 1980s. The economy was characterised by extensive regulation, protectionism, and public ownership, leading to pervasive corruption and slow growth. Since 1991, continuing economic liberalisation has moved the economy towards a market-based system. By 2009, India had prominently established itself as the world's second-fastest growing major economy. The Public Authority of India is committed to raising the investment in infrastructure from its existing level of 4.7% of gross domestic product (GDP) to around 8% (PPIAF, 2008). Infrastructure shortages are proving a key binding constraint in sustaining and expanding India’s economic growth and making it more inclusive for the end-user. Thus the Indian government is actively promoting PPPs in the key infrastructure sectors of transport, power, urban infrastructure, and tourism, including railways. PPPs are seen as an important tool for producing an accelerated and larger pipeline of infrastructure investments, and catching up with the infrastructure deficit in the country. A PPP Cell has been established to administer various proposals and co-ordinate activities to promote PPPs. The Government of India has established the India Infrastructure Finance Company Limited (IIFCL) as a wholly government-owned company to provide long-term finance to infrastructure projects, either directly or through refinance (DEA, 2008c). The IIFCL caters for the burgeoning financing gap in long-term financing of infrastructure projects in the public, private, or PPP sector. Any government project awarded to a private sector company for development, financing, and construction through PPP will have overriding priority under the scheme.

7.4 Environmental:

A view of the current development of environmental controls enacted by various governments is closely linked to both the social and political components. A well developed impact and sustainability control regime would indicate that the PPP projects are likely to encounter more detailed scrutiny in countries with less developed controls. Europe has comparatively well developed environmental control criteria as compared to India.

7.5 Political:

A strong political will from the government can only promote the commissioning of PPP projects by overcoming resistance and giving a clear signal of the government’s intention to meet its contractual commitments. The political stability of government interacts most
significantly with the economic and technological components. Government stability would be a necessary precursor to the private sector lending money for the PPP projects and also for the Special Purpose Vehicles (SPVs) being prepared to risk significant bidding costs in preparing a project proposal. This means managing the pressures and expectations of elected bodies, the media, and other stakeholders, which often push implementing agencies for faster delivery. While political commitment is welcome and necessary, pressures for overly optimistic timelines need to be dealt with appropriately.

The driving force in promoting PPP politically in Europe is the European Commission (EC), in particular the Directorate General “Internal Market”. By incentivising EU Member States to implement PPP projects, the European Commission aims at further opening national markets to competition, in particular the sectors of transport, public health, public safety, waste management and water distribution (City & Financial, 2008).

One of the major intentions of the EC under the Maastricht Treaty of 1992 is the setting up of trans-European Networks (TEN) as a means to promote the inner-European harmonisation. The development of these networks is identified as crucial in terms of the dual objectives of the smooth running of the internal market and the consolidation of economic and social cohesion. The intention to set up this European cross-border network refers to the transport, energy and telecommunication sectors. Due to the absence of specific community rules governing PPP’s in relation to TEN’s, general public procurement law has to be applied. The financing of TEN’s projects is mainly by the EIB (City & Financial, 2008).

Given the enormous investment requirements in infrastructure development in India, the need for a sustainable pipeline of PPP projects has become paramount. The private sector recognizes the enormous business opportunity of PPPs in India and has welcomed the government’s PPP initiatives. Most of the European countries have a stable political system thus making implementation easier as compared to India which has been through political turmoil in the last decade and is now showing political stability. The private sector remains eager to see more substantive, enabling changes by government in the policy and regulatory provisions and procurement procedures for PPPs in India (DEA, 2008x).

### 7.6 Technological: Technological differences in the approach to project delivery.

PPPs can effectively be delivered within Europe using local contractors because of the historical prevalence of large construction companies. India does not have the preponderance of large local contractors with the expertise in PPP projects as the concept of PPP is still evolving. In such circumstances the creation of joint ventures between local companies and larger international consultants/contractors will be beneficial. This could impose certain constrains due to differences in procurement regulation.
8. Conclusion:

The current global financial crisis is having an impact on the funding of all capital investments, including PPP projects in all countries. Despite this, projects continue to reach financial close demonstrating that the PPP model is still considered to be robust. The success of the market in future will be a function of the ability of the public sector and the private sector lenders to respond to new challenges. The momentum in PPPs is to regain traction as conditions in the financial markets stabilise. There is no doubt that the challenging fiscal position faced in Europe will have an impact on the overall capital spending over the medium term. In India PPP is a relatively new approach to procurement and lessons could be drawn from the experiences of developed and developing countries on the conditions for the success of PPP. As a relatively late entrant in the PPP development process, India can learn and benefit from these lessons.

References


BAUHAUS-UNIVERSITÄT WEIMAR (2009), Public-Private Partnership in Infrastructure Development, Case Studies from Asia and Europe, Bauhaus-Universität Weimar, Faculty of Civil Engineering, Germany, ISBN 978-3-86068-382-8.

CONSTRUCTION INDUSTRY COUNCIL (2000), The role to cost savings and innovation in PFI projects, Construction Industry Council (CIC) 2000.

CONSTRUCTION INNOVATION (2007), An examination of the suitability of a UK PFI model within the Czech Republic, the Republic of Ireland, Palestine(Gaza-West Bank), Portugal and Turkey, Construction Innovation (CI), Vol.7 No.1, Emerald Group Publishing Limited, 1471-4175

City & Financial publishing (2008), A practical guide to PPP in Europe, Second Edition,


DEPARTMENT OF ECONOMIC AFFAIRS (2008a), Scheme and Guidelines for India Infrastructure Project Development Fund were notified by the Ministry of Finance, by Office Memorandum No. 7/2/2007- PPP dated December 5, 2007.


GUIDELINES OF THE MINISTRY OF FINANCE 2007, *Guidelines for Pre-Qualification of Bidders for PPP Projects*, Government of India Ministry of Finance Department of Expenditure Plan Finance II Division New Delhi, the 5th December 2007 OFFICE MEMORANDUM,

LEIRINGER R (2006), *Technological innovation in PPPs: incentives, opportunities and actions*, University of Reading, UK. [http://www.icrcreading.org/pdf/projects/TechnologicalinnovationinPPPs.pdf](http://www.icrcreading.org/pdf/projects/TechnologicalinnovationinPPPs.pdf) [accessed on 09/10/2009]


