The aim of this research is to evaluate the experience of the UAE of using PPP so far and identify lessons learned and make recommendations that can guide the public and the private sectors toward improving the effectiveness of their procurement of such projects. The research reports the result of case studies of existing PPP projects which have identified the factors that have helped the partnerships achieve their objectives and the barriers and obstacles they have encountered in the planning, execution, and operation of such projects.
CRITICAL SUCCESS FACTORS FOR PPP

In addition to the factors that may influence the success of projects using more traditional procurement methods PPP projects are affected by other success factors. This research has reviewed previous studies of PPP to identify what researchers have identified to be the critical success factors (CSF) that will be needed to be in place to ensure that the stakeholders realise their objectives. Researchers have identified the following factors of appropriate risk allocation, savings and need for finance, favourable legal framework, political support, strong private consortium, available financial market, stable economy, transparent and competitive procurement process, effective technology transfer, thorough feasibility and assessment study, and opportunities for innovation (Bing Li et al., 2005; Qiao et al., 2001; Hodge, 2004; Pongsiri, 2002; Payne, 1997; Wang, 2006, Flinders, 2005; Jefferies et al., 2006; Hurst and Reeves, 2004). This paper will expand on these factors in the analysis of the case studies. The research also reviewed the literature to identify the factors that are believed to contribute to the failure, Failure Factors (FF), of PPP projects leading to termination or delay. The FF are lack of appropriate skills, high participation cost, high project value, high risk, lack of credibility and contacts, demands on management time, poor communication between private partners, and long procurement and negotiations processes (Bing Li et al., 2005; Papaioannou and Peleka, 2006; Nyachhyon, 2006; Thomson, 2007).

RESEARCH METHOD

The research has adopted a case study research approach to collect the necessary data. The main reason for selecting such approach is that the limited number of projects using PPP and limited exposure of the market to such type of procurement method which would make the research sample small; and that the level of knowledge and experience are limited for a more quantitative approach. The research was not able to find any database of UAE organizations involved in PPP projects. Instead the research approached the main public bodies such as the municipalities and other bodies responsible for providing public services such as water and electricity. This exercise, as well as searching through news reports, has identified a total of eight PPP projects. All eight projects were contacted and five expressed interest and willingness to offer the research an interview. A set of semi structured questions were set to guide the discussion in the interviews. The interviewees did not allow the researcher to tape the interview and hence only notes were taken. The interviews were conducted with a senior figure in every case study. They were a senior consultant to the public client in project A, the operation manager of the private party in project B, and the head of the commercial bank that is a member of the private consortium in project C.

Case Studies

Due to the limitation of space, this paper discusses three of the case studies. The projects are located in three of the seven emirates, Abu Dhabi, Dubai and Sharjah.

Case study A is a project for operating, managing and servicing seven existing water and electricity centres. These are distribution centres that receive water and
electricity from the production units and then distribute them through its network to the customers. These centres will also be responsible for dealing with customers direct including revenue collection. The value of the contract is estimated around 50 million AED (US$1=3.67AED). This sum does not cover any additional work such as the construction of new network facilities or upgrading the existing network. Currently, the project is still at tendering stage with ongoing negotiations with four international consortia. Bidders have expressed concern regarding the difficulties they may face in the collection of revenues from customers and the lack of review mechanisms of management fee. The research interviewed a senior consultant who has been involved in the project since the beginning and participated in preparing the feasibility study, tender documents, tender analysis and the negotiations.

Case study B is a project that forms part of a major theme park that the local municipality wanted to develop with the involvement of the private sector. Such a project required experience and major investment which the municipality wanted the private sector to provide. Therefore, the municipality offered the private sector an area of 260,000 square feet in the public park to develop as a PPP project. A local investment company won the contract with a 30 year concession. The project focus is on providing education for visiting school groups, as well as the general public, through entertainment. The idea of having such a theme park was an initiative of a private investor who approached the municipality and presented the idea. The project value is 300 million AED which covers the design and construction and it is due for completion in the summer of 2008. The project was offered to this investor through negotiation. The research interviewed the operation manager of the private company who had significant experience of the project.

Case study C is a project to design, construct, fund and operate of phase 2 of an industrial zone. The concession period is 20 years. The client, a public authority, wanted to attract international companies to invest in the Emirate by relocating their headquarters and factories to the UAE. The client completed phase 1 and the plots were rented out. For phase 2 the client wanted to engage a specific reputable international organization to carry out this phase and use its contact network to attract international companies to relocate to the completed industrial zone. The project’s cost is approximately 1 billion AED, which covers the design and construction costs of the facilities. After completion of the construction phase, the private organization should arrange and approach international companies to rent plots and establish factories or headquarters in the area. The contract was negotiated with the selected private investor. The financial arrangement included the client agreeing to give the rentals received from phase 1 to finance phase 2 (which would cover 75% of the finance needed for the infrastructure) while the consortium will finance the 25% balance. The consortium will then pay annual rent to the client. The research carried out the interview with a senior manager of the commercial bank that has worked with the client in planning and negotiating the contract.

DATA ANALYSIS

Case Study A: Water and Electricity Distribution Centres
Critical Success Factors
The risks in this project were clearly defined for all parties. The private parties that participated in the tender were capable to deal with most types of risks including design, construction, finance and operation risks. However, there are two types of risk that are critical to the success of this project but are not covered by the contract. The first is related to the tariff fee paid to the private party due to the lack of mechanisms for reviewing the tariff fees. The private bidders were concerned about the increase in operation costs and as a consequence to that they would have to request the government for fee review and additional money to cover the cost. Bidders had either to propose some conditions in their offers to minimize this risk or propose higher fee. The second risk is related with the collection of water and electricity bills from the customers where in certain cases it has been a difficult exercise. This has meant that the government objective to cut down on expenditure is difficult to achieve. In effect there will be extra cost that the public sector may have to pass down to the customers by increasing the unit rate of the water and electricity. There was concern that such an increase in customers’ bill will hit the low paid users. The Senior Consultant for the project explained that “many employees have households, and water and electricity bills paid by their companies. So it is the low paid [users] that pay their bills that will be affected”.

There is no legal framework or law to support the procurement of PPP projects in the UAE legal system. Hence, the private party had to include conditions in the contract for unclear issues to avoid disputes. The client requested a contract that is clear to all parties in order to reduce the likelihood of a dispute on interpretation. In addition, the contract provided for the formation of an arbitration committee of 5 members, 2 from the client, 2 from the private party and 1 independent, to resolve disputes.

The concerned Emirate has an independent regulatory authority for water, electricity and sewage responsible for regulating and licensing all companies working in water and electricity supply in the Emirate. This authority can play a critical role in resolving disputes between the parties. However, the role of such authority was not clear to the parties and its decisions are not enforceable or final. This would reinforce the importance of having a clear contract to minimize the risk of irresolvable disputes.

The two companies involved in the consortium are professional and have rich technical experience in such projects. They acted as one unit in the negotiations represented by project team. The consortium has sound financial skills and abilities as well as disciplinary attitude and commitment to the project. The private party was capable of providing innovative solutions in designing and constructing new water and electricity network and sub-stations. The Senior Consultant said, “They can provide innovative solutions in designing and constructing new network as well as in restructuring the organization to be more effective”. They also have the ability to restructure the organization structure in the distribution centres making them more effective in handling the operation requirements.

The availability of a sympathetic financial market was not so important in this PPP project, as initial investment required by the private party was not so big and could be financed easily by their own funds. The initial investment is mainly consists of payments for the tendering process, advisory requirements, salaries for staff and project team. It was agreed that the government would fund any required construction project. In case additional funds were required, the financial market in
the UAE including banks and financial institutions can provide competitive financial packages with low interest charges. The economy of the UAE has provided the stability required for the success of such projects. The economy was growing rapidly and the demand for water and electricity is increasing. The materials and products required for the PPP project are available and can be supplied easily to the project; but unfortunately the inflation rate in the country is high, over 9%, and the fluctuation in prices is unpredictable. The private party had the difficult task of providing a fixed rate for fee increment for the period of the PPP when they could not get their suppliers to fix their prices for more than three months, sometimes even for 30 days.

The procurement and tender processes were transparent to all involved parties. The deadlines for each stage were clearly identified and the private parties did not face any problems in communicating with the public party for clarifications and when the bid results were known they were communicated to all bidders. The client commissioned four different advisors to conduct detailed feasibility studies and assessment covering the legal, financial, water and electricity aspects, and describing the potential benefits of this project. However, tender prices were higher than what was estimated due to the fact that the feasibility study was carried out one year earlier during which prices increased more than forecasted.

The political support needed was missing in this PPP project. The government was concerned about the high tenders that could lead to higher water and electricity bills to customers. The problem requires either change to the revenue collection regime or a subsidy from the government to facilitate such project. There is concern of the effect of rise of service charges on the commercial sector where such increases may push up inflation. It was felt that this issue was pivotal to the later decision of the government to withdraw its support to this PPP. The government was also concerned of the possible redundancies of the privatised service where the staff are predominantly UAE nationals when it has set one of its main priorities the creation of more job opportunities for the locals. There was also a concern that the private party would cut jobs to maintain its profit margin in the face of these difficulties. As a result political support was withdrawn and ultimately the project was stopped/suspended.

**Failure Factors**

The lack of skills of the private party was not an issue as they have long experience in handling similar projects and if necessary they could recruit staff that can handle the project efficiently from the local market to train them, or from abroad if required.

The cost of participation in the tender was more expensive than traditional procurement methods due to the hiring of the different advisors to support both the public and the private parties. Still the participation cost for the project was not more that would be expected for a PPP project. The project finance was not a problem as the tender covered the cost of management of the centre and construction works are to be funded directly by the government. It was expected that the government would make an advance payment to the private party to cover the set up costs.

The risks involved in the project were high due to the issues highlighted about regarding the tariff fees paid to the private part and lack of review mechanism in the contract. The high risk was also caused by the difficulties in the collection of
revenue. Therefore conditional offers were submitted to the public sector to minimize those risks and protect the bidders’ interest.

The private parties faced difficulties due to the fact that they were relatively new to the country and lacked the contacts and supplier network. It might have been useful for the private companies to involve local partner with sound reputation to invest in the PPP project in order to avail better facilities from the local market through the local partner’s network.

The private party was complaining of the long time the client is taking to reach the final decision. The waiting period and continuous negotiation is very demanding on the management time, as they have to spend time in following up the project and discussing it in the agendas of their meetings. This is extra cost which will need to be covered by the project.

In conclusion it was expected that this project would fail due to the lack of political support. The government does not want to increase the water and electricity charges to the customers as it may lead to extra inflation in the country. The private parties failed to propose an offer that may reduce the cost on the government, but in fact their offers increased the government cost in case it decided to continue to provide free water and electricity to the UAE citizens. The other factor that the private parties could not handle efficiently is the fluctuations in prices in the market; they could not obtain firm prices and commitment from the suppliers involved in the project. They lacked the experience on how the local market works and did not have a good local supply network. So the risks in this PPP project were quite high and the contract did not provide mechanisms to deal with such issues.

Case Study B: Theme Park

Critical Success Factors
The risks in this project are carried fully by the private partner. The Municipality has taken neither the financial nor technical risks of the execution of this project. The private partner will handle design, construction, financial and operation risks. The private partner has sufficient knowledge and experience within its structure to deal with the mentioned risks. The main risk that concerns the private partner is whether the Theme Park will attract enough visitors to make it financially viable. The private partner, hence, developed a detailed marketing plan focusing the attention of the marketing team on how to attract school students to visit the Theme Park due to the learning and educational value the park has. To minimize this risk and limit its liability the private partner formed a Limited Liability Company (LLC) to carry out the project.

Adopting PPP allowed the Municipality to develop such a facility without having to resort to using its own capital at a time when there are serious pressures to provide ever expanding services to society. Using PPP has allowed the Municipality to embark on a venture in which it had no experience in operating such facility.

Again in this Emirate there is no PPP Law therefore the parties had to rely on the contract between them to govern their relationship. The contract is a lease agreement, where the private partner rented the land for a period of time, 30 years, by paying annual rent to the Municipality. The Municipality will carry out regular
inspections to make sure that the quality of works is good. A third party may be engaged to carry out inspections on the rides.

The only political support that this project will receive will be in form of the Municipality processing the approvals on urgent bases; the Municipality will support the project with other Government authorities to take approvals, for example for water and electricity connections and approvals. Although the government is not promoting the project the parties have taken advantage of the overall support of the government to the tourism industry and the facilities it provides to support tourism by participating in exhibitions inside and outside the country.

In terms of having a strong consortium in this PPP project the private partner was one company only. The owners of the company set up the management team and selected staff with good experience in entertainment industry. It is their first project and the company was formed specifically to carry out this PPP project. The owners of the company are well known Saudi businessmen with good experience in establishing and investing in new projects.

Despite the availability of good financial market in the UAE, the private partner could not enjoy the available financial offers by the banks because it lacks credit history in the market. It is a new-formed company and the project is a BOT project, so the company does not own the land, and therefore it will not be considered as a security to the banks. The Operation Manager in the private company said “banks drew back from financing BOT project as it is new and we don't own the land. They prefer to watch and see what will happen”. As the government did not provide them with any financial support, the investors had to rely on their own resources.

The market has witnessed a significant rise in the cost of resources, especially materials, over the last 2 years. The fluctuation in construction materials prices had a strong affect on the project leading to 30% increase in the cost. In addition, a recent purge by the government of labourers lacking residency permits had a significant effect on progress with subcontractors facing serious recruitment problems.

There was no tender process for this project; it was an initiative from one of the owners of the private company. Negotiations and discussions were carried out with the Municipality before agreeing on the BOT arrangement. Presentations and ideas were exchanged as well as negotiations on the annual rent. The private party carried out a feasibility study. However, this study had to be revised later. The original study was carried out by staff who had not experience in the entertainment business. The feasibility study had to be revised by experienced staff employed after signing the contract with the Municipality.

The financial pressures have driven and encouraged innovation to make the project commercially viable. The Operation Manager explained "we had to change the design .... for example the jogging track used to cover 25% of the total area but it contributed with only 1% to the revenue, we had to change this”. Many changes to the original design were introduced which caused the project to be delayed.

**Failure Factors**
The Private Partner employed experienced staff to carry out the technical works required for the project. The firm also had the management and business skills but
they lacked the experience and knowledge of the local market. This has led to the selection of the construction contract that exposed the firm to the volatile changes in the market. The project needed the support of a local partner that can negotiate better terms for the company and guide them in the selection of the best procurement methods to carry out the project. The project value is quite high and it increased due to the increase in prices of construction materials; and as there is no financial support from the banks, the owners of the company had to rely on their private sources to secure the extra funding. Hence the risks of this project are fully carried by the private partner, so huge responsibilities will be laid on the project team to make the project successful. As the project was negotiated with the Municipality the procurement period was not onerous. The Municipality did not take much time to decide, so the management did not waste so much time in waiting for a decision; this minimised the demands on management time.

In conclusion this project has many of the CSF in place. The speculative nature of the project means that the project team will have to work hard to promote the Theme Park and to take advantage of the booming tourism industry in the UAE. The project has the potential of expanding further, hence, it has to demonstrate its success to be able to win the trust of the financial institution, which is needed to fund future expansion plans.

**Case Study C: Industrial Zone**

**Critical Success Factors**

The risks in this PPP project are distributed between the partners where the private partner handles the design, construction and operation risks, while the public party is sharing the financial risk. The public party is contributing approximately 75% of the cost required to carry out the project. Here the public party is minimizing the business risk of the private party by paying the rent of all plots of the project that fail to attract a tenant. Such arrangement represents a significant support and encouragement to the private party to enter into this PPP.

In addition to the saving in the initial capital investment that the public party will enjoy, the main value for money through this PPP is being able to attract a leading international bank, like the foreign bank involved in the PPP project, to invest in the UAE economy. Such an investment will attract other leading banks and international companies to shift their business to the UAE and invest in its economy.

This Emirate did not have any law for leasing lands and even trading in lands was very limited in the Emirate, and it was mainly between UAE nationals in that authorities. However, to make this project successful new Laws and Decrees were issued that allowed leasing lands to non-UAE nationals in certain areas. The Law was developed at later stages to allow Gulf Council Countries' (GCC) nationals to own land in the Emirate and for non-GCC nationals to lease lands for long periods. Other Laws and Decrees were issued to allow foreigners and non-GCC nationals to have trading license in certain locations and areas of the Emirate, which will allow them to start and run their own business in the Emirate. Those Laws and Decrees were a step forward in attracting foreign investors to invest in the Emirate and it had a positive effect in this PPP project because it enabled the private party to attract international companies to set up business within this project. The project enjoys a huge political support. It was the first PPP project in this Emirate and the government wanted to make it successful. The Head of Commercial Banking in the Local Bank
said, "The project had to succeed, the Government was behind it and it was willing to inject money. That was not an issue".

The PPP consortium was strong having the necessary knowledge and experience. The foreign bank carried out many PPP projects in different countries, and it has sound knowledge and experience in processing PPP projects. It has huge contacts with big companies through its banking network. The local bank did not participate in PPP projects before, but it has good experience and wide contacts in the local market and has been involved in many local development projects. Both banks have sound knowledge and experience in financial market, as it is their core business. As explained above, 75% of the project's cost will be funded by the Government through utilization of Phase 1 revenues, the Consortium will fund the balance 25%, 250 million AED which they should not have a problem to arrange.

The tendering process for this project was direct negotiation between the public and the private parties. Discussions focused on clarifying issues and agreeing on the scope of work. The business model itself was viewed as an innovation that helped the public client achieve its objectives. For that purpose a thorough feasibility study was carried out in association with a famous legal consultant office in the Emirate.

The project did not suffer due to the lack of appropriate experience among the Consortium. Both banks in the consortium complemented each other; the local bank has good experience in the local market, which will help in making decisions like selecting the designers and the contractors; while the foreign bank has good experience in PPP projects. There were no participation fees, but initial payments for advisors were needed, for example for legal advice. In general the participation cost was not high. The project value is one billion AED which is considered high but when the private party only needs to pay 25% of this cost this was found to be reasonable. The credibility of the private party and the significant support from the government support have reduced the risk of failure of this project.

**Failure Factors**

This project did not have any significant failure factors.

In conclusion the project is considered a great success and it has created an opportunity to start other PPP projects in the Emirate. It had all essential success factors like the huge political support, the sound knowledge and experience within the Consortium as well as the attractive financial arrangement and guarantee agreed with the Government.

**CONCLUSION**

PPP is still at its infancy in the UAE with fewer than 10 projects that can be identified in the country. This paper aim was to examine the key factors for the success of PPP. The main factor was political support. This is not surprising as in the absence of experience in the public sector and the lack of the legal framework to support a new business arrangement such as PPP the industry and its stakeholders require the intervention of the political leadership and authority to create the confidence and understand the perceived risk of such projects. It is also necessary to develop the knowledge of where PPP can be deployed successfully. It was clear from one of the
case studies that if the public client had the deep understanding of what would make PPP successful, much money would have been saved on what looks like an aborted project.

REFERENCES


Wang, Yin (2006) Keys to Successful Public Private Partnerships (PPP’s), University of California SPPD Research. Proceedings of Public Private Partnerships-
Opportunities and Challenges Conference. Arranged by Hong Kong University and Hong Kong Institution of Engineers-Civil Division. Hong Kong Convention and Exhibition Centre, Hong Kong.