# PPP IN DENMARK – ARE STRATEGIC PARTNERSHIPS BETWEEN THE PUBLIC AND PRIVATE PART A WAY FORWARD?

#### Kristian Kristiansen

Associate Professor, Institute for Planning, Innovation and Management, Technical University of Denmark, krk@byg.dtu.dk, Denmark

### **Abstract**

It is the aim of the paper to contribute to the discussion on restating the PPP principles. The paper is based on an ongoing research project: "Procuring Facilities Management through PPP's". A review of literature with a critical, but positive attitude towards PPP is given. An overview of PPP in Denmark is presented. Only a few PPP's have been initiated and though more might be in the pipeline, it is likely that the market for PPP is too small. Government policy is positive toward PPP. Private financing is not seen as an essential part of PPP. Attitudes among participants in PPP are described on the basis of 11 open interviews. Though the principles of PPP are considered to favour innovation and whole life costing, doubts are also raised about the possibilities for realization of the potentials of PPP. The Danish situation points towards a need for a broader view on how innovation and whole-life thinking can be released in PPPs. The question is raised whether the formation of partnerships between the public and private part might be a way forward for PPP in Denmark and elsewhere.

**Keywords:** PPP, Denmark, strategic partnerships

#### 1. Introduction

A need for revisiting, restating or even revamping PPP has been declared. The concept of PPP is gaining ground in both developed countries and countries under development. However the recent financial crisis has spread uncertainty about any kind of investment, but maybe particularly about private investments in public facilities and infrastructure. Both circumstances make it interesting to revisit PPP.

It is the aim of the paper to contribute to this discussion through using PPP in Denmark as a case. The paper is written as part of an ongoing research project on procuring Facilities Management through PPP. The aim of the research project is to contribute to the understanding of when or under which circumstances it is beneficial from the point of view of the price and quality of the FM services to procure these through a PPP, i.e. with the facility and the facility management in the same package.

The paper begins with a review of literature i.e. a review of papers - from construction management journals - with a positive-critical approach to PPP. Papers with a very

positive or very negative attitude towards PPP have been omitted. The review is thus not complete, but gives an impression of issues discussed. Then follows a basic description of the PPP market in Denmark: The projects that have been and not been initiated and the actors on the market. The information on this has come from the internet and has been supplemented with information from interviews. Finally results from open interviews with 11 persons from the group of actors in the Danish PPP market are described. In the conclusion it is suggested that strategic partnerships between the public and the private parties might be a way to develop the concept of PPP further.

## 2. Review of Positive-critical Literature on PPP

Looking at the performance of PPP projects, it does not seem evident that the PPP concept itself leads to higher quality and lower costs.

Reviews of various evaluations of PPP projects suggest that the evidence of cost reductions is ambiguous, but it must be concluded that they do seem to take place (Greve et al., 2005; Hodge and Greve, 2007; Kristiansen, 2008). This seems to be in contradiction with reports from the National Audit Office, that have evaluated 9 PFI projects and discovered mean cost reductions of 17% (CIC, 2000), and also with the report from Arthur Andersen that looked at 17 projects and found average cost reductions of 17% (HM Treasury, 2000). However CIC conducted an investigation that might clarify this seemingly contradiction. It showed a marked difference in cost reductions between type of projects. Transport and prison projects had the greatest reductions of costs in the range of 10-20%, while hospital- and educational projects were between 5% less expensive and 5% more expensive. Furthermore that large and experienced clients were far more successful in realising cost reductions. CIC states that NAO in its sample had many road projects and that the evaluation from Arthur Andersen had many centralised clients in its sample. Also that procurement and maintenance of prisons previously had been handled somewhat inefficiently and that technological innovation in the form of the new types of asphalt had taken place in the road projects. (CIC, 2000)

CABE has in two evaluations looked at the design quality of buildings in PPP projects. In a more general evaluation it is concluded that though examples of excellent design can be found, they are more often an exemption than the rule. Most of the buildings were considered to be of insufficient design quality (CABE, 2005). In an evaluation specifically of PFI secondary schools built between 2000 and 2005 it was found that more than half of the schools were of poor or inferior design and only 19% were considered to be partly good or excellent. (CABE, 2006)

In general it seems like a positive outcome – lower price and/or better quality - of using PPP is not self generated. Then what has in the debate been suggested as factors or circumstances that can influence the outcome of using the PPP model?

One important point in the PPP model is that innovation is supposed to take place. The private party is considered to be able and willing to find new ways of managing the building processes and the facilities.

A Swedish Ph.D dissertation has looked in to this and concludes that there are serious hindrances for the innovation potential in PPP. One is that the financial part, that has greater influence than in other types of tendering, will be interested in reducing risks and therefore tends to look at new and untried solutions as too expensive and risky. This is said to be worsened through the interest of the public part in transferring risk to the private part by setting a fixed price and delivery date. A partnership-like relationship between the private and public parties is suggested as a possible solution (Leiringer, 2003)

Participants from 68 PFI projects have been interviewed to find out what challenges are seen as the most important for PPP projects. It is concluded that the participants think:

- Risk management needs to be developed
- Transaction costs are very high
- Negotiations are complex and run over a long period of time
- It is difficult to specify the quality of services
- It is difficult to set prices for facilities management services
- There are potential conflict of interests behind the negotiations
- Clients are considered to often have difficulties in handling PFI projects (Akintoye, 2003)

It can be said that PPP projects change the relationships between the parties from one-off to longer lasting. Since "trust" often is considered to be crucial for relationships an investigation has attempted to measure how much trust there is between the parties in PPP projects. In general it seems like trust is actually developed between the parties on the private side, but mostly on a team level, not as a part of the managerial approach. Between the public and the private parties not much trust was found. This is said to be a challenge for the PPP concept, since it builds on long lasting relationships between the public and private parties and it is suggested the PPP firms should engage themselves in strategically developing trust in order to create increased value (Smyth and Edkins, 2007)

The use of the "public sector comparator" has been criticized for leaning too much on quantitative measuring and thereby excluding broader societal concerns that are difficult to quantify and force the participants to work on a contract based on cool cash instead of trying to take care of long term considerations.

Use of partnerships are suggested as a solution to these problems and considered to offer more value for money than traditional PPP's:

- Risk sharing can be less expensive for the public party than the transferral of risk.
- Conditions for innovation will be improved if all issues are not locked down in a detailed contract, but are held open through collaboration
- Synergy between the public and the private parties can be made when the public party is recognized for its particular competences through a collaborative arrangement.

(Clifton and Duffield, 2006)

PPP is about integration of the delivery of a product and the related services, and cultural differences between construction firms and facility management firms have to be overcome. In an investigation employees in construction firms were characterized as "hunters", while facility management employees were called "farmers". Hunters were said to be driven by the rush of winning a project, delivering on time and to the price and were

good at improvising in an atmosphere of strict deadlines. The farmers on the other hand believed in long lasting relationships based on the needs of the clients and to create solutions that were experienced as valuable by the client. Not much sympathy were discovered between the two mentalities (Johnstone, 2007)

Cultural differences often reflect structural conditions. System integration is more common in for instance the transport sector or in the capital goods industry than in construction. A study has looked at this and concludes that integrated delivery of products and services take a long time to develop and is a profound and radical change. The value chain has to been integrated and the needs of the costumer must lead the design of solutions where hardware, software and services are seen as one. And the supply chain has to be managed from the parent firm through contracts or partnerships (Brady *et al.*, 2005)

Overcoming cultural differences and develop integrated solutions are probably more difficult in construction industry, which is often characterized as a "loosely coupled system" orientated towards singular projects making partnerships, costumization, change management, supply chain management or system integration something that has been discussed a lot, but seem to be difficult to introduce successfully (Dubois and Gadde, 2002)

Though this brief review is far from exhaustive it does show that PPP have to overcome cultural differences between the participants as well as conditions embedded in the structure of the construction industry. Though cost reductions do occur it does not seem evident that the PPP concept itself leads to lower costs and higher quality. A number of hindrances for innovation in PPP projects can be mentioned and partnership between the public and private part are suggested as a mean for improving PPP.

# 3. The PPP Market in Denmark

The Danish government is encouraging formation of PPP projects and has made it mandatory to screen public construction project for suitability for PPP. On the other hand all state PPP projects of more than 10 mill. euro has to be approved in the financial committee. And for municipal projects with private financing the municipalities have to deposit an amount similar to the construction costs of the project.

So far very few PPP projects have been realised. Since 2005 only four real PPP projects have been initiated, i.e. projects with private financing and running over 20 or 30 years. The projects include two schools, a courtroom and the public record office. Only one of these projects has been constructed, while two are under construction and one is now delayed because of the financial crisis.

Three more projects are sometimes mentioned together with the projects above, but are not really PPP projects either because they are not financed privately or run for only 10 years.

The mandatory screening procedure has meant that additional 19 projects have been screened: For five of these projects PPP have not been chosen, 8 are still under consideration and PPP have been chosen for 4 projects while 2 projects have found a form with a 10 year period and a shared public-private equity.

Seen from the demand side the market for PPP seems weak. This has put its mark on the supply side. 12 PPP consortia have made bids, but 9 have only bid for 1 or 2 projects, while 3 have bid for all projects. One consortium has been rather successful and won 3 projects. Another consortia has won one project, but is also working at PPP projects internationally, particularly in the UK.

Neither on the demand nor the supply side the market for PPP in Denmark seems large enough for the actors to gain experience with the PPP form. Whether there will be more PPP projects in the future is uncertain in these days of a financial crisis, but the results from the screening procedure make it unlikely that any boom in the demand for PPP is waiting.

The Danish Enterprise and Construction Authority have recently formed a new umbrella concept called "Public and Private Cooperation" subsuming PPP, service partnerships (where the public party collaborates with a group of companies on maintenance and renovation over a period of time), "PPP-light" (which is PPP with public financing and public ownership), sale-and-lease-back arrangements, public-private joint ventures, as well as other forms such as partnering (Kristiansen, 2008).

# 4. Experiences with and Opinions on PPP among Actors in the Danish PPP Market

11 open interviews have been conducted and the results will briefly be summarized below. There was a general agreement on PPP actually leading to integration of concerns related to the management of the facilities into the design and the construction of the building through (among other issues) whole life thinking. Actors from both the private and the public parties thought that PPP led to better buildings in the sense that materials and products of higher quality were used, and that repeated cuts in budgets for maintenance were avoided.

It was also generally agreed that placing the responsibility for both construction and maintenance on one actor was a sound principle and that the long dialogue phase led to improved projects.

On the other hand it was also said that it was difficult to make an interesting bid solely on the basis of integration of hard FM. Possibilities for innovation in this area were considered to be limited and could only lead to minor reductions in the total price. And it was also said that being very innovative meant increasing your risks.

Challenges were seen in coordination of the team and creation of team spirit. In particular cultural differences were seen as a problem. One said that the Facility Management people always preferred simple solutions with low maintenance costs, while the architects

considered that the building should be a nice place to be in and the contractor primarily was interested in economic aspects and buildability. The interviewed from the facility management side said that they often had felt that it was difficult to convince the others and that their arguments were met with "that this would be too expensive".

Some said that whole life costing was a difficult discipline and it was difficult to set the right price for maintenance services.

The interviewed from contractors expressed that they were mainly interested in PPP projects as construction projects, though they did not mind investing a little bit of their principal capital in PPP projects.

The PPP concept was also seen to have certain disadvantages. One mentioned was the high costs of bidding. The detailed contracts attempting to specify all future events. And also that the PPP projects had to be rather large because of the high transaction costs.

One interviewed said that it seemed evident that PPP did not lead to interesting new design solutions like sustainable buildings or best possible design solutions, because the public client could not choose an excellent building when it was a little bit more expensive than another of mediocre design which fulfilled the criteria.

There was in general an interest in discussing how the public can get better value for money within or without PPP. Several expressed interest for partnering or partnerships between the public and private parties, saying that the most important factor behind a positive outcome was an experience of shared goals for the project. Framework agreements were also seen as interesting. One said that PPP was quite a thing. Instead of a 30 year long contracts it might be a lot more convenient with a partnership and several smaller contracts.

# 5. Conclusion and Discussion

Starting with the lessons that can be learned from the use of PPP in Denmark, it seems obvious that the market for PPP project can be too small for both the public and private parties to gather enough experience with PPP's to handle them professionally. This is relevant for other smaller countries. It is also logical that if the market is too small it will be natural to sort of bundle PPP with other similar types of tendering and focus on how to improve the interaction between the private and public sector in the procurement of public facilities through the use of a number of project types.

In Denmark hindrances has been made for private financing by making it mandatory for municipalities to deposit an amount when private financing is used. This is done to avoid excessive public spending on new facilities that will endanger the opportunities for future generations. The result must logically be that focus on better value for money will be stronger.

A more general lesson is that the discussion of the future for PPP has to take account of national political and economic context.

In the Danish context PPP will have to compete with similar project types solely on ability to deliver effective public buildings efficiently. The interviewed found that the basic ideas of PPP were sound, i.e. to have one actor have the responsibility for both construction, operation and maintenance of the facility. One the other hand they also asked for more room for innovation, possibly through risk-sharing and the inclusion of more issues to innovate on. Among the interviewed PPP was criticized for high transaction costs and the very detailed and inflexible contracts.

This points towards the use of partnerships, partnering or other types of collaboration between the public and the private parties.

The reading of positive-critical literature on PPP seems to support this to some extent. Some directly suggested use of partnerships (Leiringer, 2003; Clifton and Duffield, 2006). Advocation of developing of trust is indirectly supportive for partnerships (Smyth and Edkins, 2007). The challenges for PPP described in the investigation made by Akintoye (Akintoye, 2003) might be handled through partnership arrangements. A partnership might be a way to handle the cultural differences (Johnstone, 2007) and gradual change of the construction industry towards system integration that could be supported through partnerships.

Inclusion of partnerships in PPP opens a discussion on what PPP really is. It could be argued that PPP consists of certain elements that cannot be omitted, such as: private financing, the private party is responsible for all aspects of the building over a long period of time, the public party gets the advantages of not having the risks and responsibilities related to ownership and possible also ideas from what is called New Public Management. Since partnerships are about collaboration on the basis of shared goals and values and defining an area of shared interests, it could be argued that since this will mean more risk sharing and public financing, partnerships are not compatible with PPP. On the other hand it could also be argued that this is a semantic discussion and that the basic idea of PPP is to improve the interface between the public and private parties and that some of the elements of PPP can be changed and developed.

So all in all there seems to good arguments for looking at the potentials for using partnerships between the public and private parties in a further development of PPP, though the national context has to be taken into account rather than opting for an universal model.

#### References

Ahadzi, M. and Bowles, G. (2004) Public-private partnerships and contract negotiations: an empirical study, *Construction Management and Economics*, 22(9), 967-978.

Akintoye, A. (2003) Achieving best value in private finance initiative project procurement, *Construction Management and Economics*, 21(5), 461-470.

Andersen, Niels Åkerström (2006) Partnerskabelse, Hans Reitzels forlag.

Bak, Helle Jull og Tjell, Janni (2008) Integration of FM in PPP projects, student paper, DTU

Brady, T., Davies, A., Gann, D. (2005) Can integrated solutions business models work in construction?, *Building Research and Information*, 33(6), 571-579.

- Bröchner, J. (2008) Construction contractors integrating into facilities management, *Facilities*, 26, (1/2), 6-15.
- Bult-Spiering, M. and Dewulf, G. (2006) *Strategic Issues in Public-Private Partnerships*, Blackwell Publishing, UK.
- CABE (2005) Design Quality and the Private Finance Initiative, CABE.
- CIC (2000) The Role of Cost Saving and Innovation in the PFI Projects, CIC.
- Clifton, C. and Duffield, C.F. (2006) Improved PFI/PPP service outcomes through the integration of alliance principles, *International Journal of Project Management*, 24(7), 573-586.
- Dubois, A. and Gadde, Lars-Erik (2002) The construction industry as a loosely coupled system: implications for productivity and innovation, *Construction Management and Economics*, 20(7), 621-631.
- Erhvervs- og Byggestyrelsen (2008) Selvom der er forskel .. Kan du lære noget af udenlandske OPS projekter, København.
- HM Treasury Private Finance Initiative Task Force (2000) *Value for money drivers in the Private Finance Initiative* (A report by Arthur Andersen and Enterprise), HM Treasury, London.
- Hodge, G.A. and Greve, C. (2005) *The Challenge of Public-Private Partnerships*. *Learning from International Experience*, Edward Elgar Publishing.
- Hodge, G.A. and Greve, C. (2007) Public-private partnerships: an international performance review, *Public Administration Review*, 67(3), 545-558.
- Hodge, G.A. (2004) The risky business of public-private partnerships, *Australian Journal of Public Administration*, 63(4), 37-49.
- Holmes, J., Capper, G. and Hudson, G. (2006) Public private partnerships in the provision of health care premises in the UK, *International Journal of Project Management*, 24(7), 566-572.
- Johnstone, S. (2007) Hunters and farmers? The HRM implications of product-service in construction, CIB World Building Congress 2007.
- Kristiansen, Kristian (2008) OPP og indkøb af facilities management ydelser, Workingpaper, DTU.
- Leiringer, R. (2006) Technological innovation in PPPs: incentives, opportunities and actions, *Construction Management and Economics*, 24(3), 301-308.
- Li, B., Akintoye, A., Edwards, P.J. and Hardcastle, C. (2005) Critical success factors for PPP/PFI projects in the UK construction industry, Construction Management and Economics, 23(5), 459-471.
- NAO (1999) Examining the Value for Money of Deals under the Private Finance Initiative. HMSO, London.
- Okoroh, M.I., Gomborq, P.P., John, E. and Wagstaff, M. (2001) Adding value to the health care sector facilities management partnering arrangement case study, Facilities, 19(3/4), 157-163.
- Smyth, H. and Edkins, A. (2007) Relationship management in the management of PFI/PPP projects in the UK, *International Journal of Project Management*, 25(3), 232-240.