

Built to Serve; the benefits of service-led PPPs

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The Serco Institute was established in 1994 by the international services company Serco Group plc, to undertake practical research into public service contracting and the design and management of public service markets.

Executive Summary

As the world's fourth largest economy predicting 9% GDP growth per annum, India has a great need infrastructure development driving activity in a variety of sectors from petrochemicals to power; from transport to urban regeneration; and investment may also be made in social infrastructure as well, such as health and education. As India meets the challenges of developing an infrastructure fit to support its growth, extracting the best value from the private sector to ensure high quality public services and a legacy infrastructure fit for purpose will no doubt be a high priority.

Yet the value extracted from PPPs around the world has been variable, and consequently many lessons have been learned in the process. PPPs have evolved from the early days when the public sector simply let a design and build contract to a construction company for a piece of infrastructure. The evolution has been necessary, as such an approach has led to higher through life costs, designs that are not flexible enough to cope with inevitable changes in service needs, and conflict between the builder, maintainer, user and procurer of the infrastructure. For this reason, more recent PPPs have been service-led; whereby government contracts with a service provider for a set of public service outcomes, and allows them to design and build the infrastructure required to deliver such a service.

Governments and service providers alike have studied this approach carefully to assess the benefits, and the Serco Institute has been at the forefront of such research and debate, especially in the UK.

This document outlines the philosophy of service-led PPPs and captures some of the findings of interview-based research into its benefits. In brief, its conclusions are:

1. The relationship between the private sector and public sector has become more complex, with greater responsibility for the delivery of outcomes (and greater risk) being transferred to the private sector.
2. Service-led PPPs have emerged from this evolution as a means to ensure that the design, management and cost of infrastructure is totally aligned with and supports the public service purpose that the infrastructure is there for, not just immediately after construction but for the life of the asset.
3. Such PPPs are now demonstrating significant benefits:
 - a. Leadership by and early input from a service delivery partner results in a design that is effective for longer. Public services need to be flexible, particularly in developing economies with a rapidly growing middle class, and operational experts made responsible for service delivery will factor flexibility into the design from an early stage, whereas builders will not.
 - b. Early input from the service provider also results in better service delivery. There are many examples whereby the leadership and early involvement of the service provider ensures that the asset is fit for purpose at a remarkably detailed level and supports directly the public service function for which it has been built.
 - c. Total leadership of design, build, maintenance and service delivery by an operator results in clarity of ownership, rapid resolution of conflict and better management of risk.

Serco Group plc

Serco is an international service company, which combines commercial know-how with a deep public service ethos. We improve services by managing people, processes, technology and assets more effectively. We advise policy makers, design innovative solutions, integrate systems and - most of all - deliver to the public.

Serco supports governments, agencies and companies who seek a trusted partner with a solid track record of providing assured service excellence. Our people offer operational, management and consulting expertise in the aerospace, defence, education, health, home affairs, local government, science, technology, transport and the commercial sectors.

Serco has a turnover of about £2.5bn, delivered by over 46,000 staff in 35 countries around the world. Serco has been delivering public services for 40 years, was floated in 1987 and has since achieved an annual growth of 26%. Management Today has also voted Serco for three years running the most admired support services company in the UK.

Serco is involved in nearly every aspect of public services in the UK and around the world, and touches the lives of citizens on a daily basis; Serco ensures that the citizen is safe on the road with its speed cameras; our air traffic controllers will have watched over them as they flew off on holiday; our local education authorities may monitor their children's' academic progress; we might even empty their bins. We look after the UK's nuclear deterrent and make sure peoples' watches are accurate by looking after the Greenwich Mean Time. We also ensure people can get to work on the Docklands Light Railway or one of our rail franchises; ensure the lottery balls are round enough by managing the UK's National Physical Laboratory; manage the 4 minute warning on behalf of the MOD; ensure that troops can talk to each other through global satellite communications; keep over 7,000 offenders away off the streets in our prisons and detention centres; protect children on the internet by helping catch internet paedophiles; simplify car journeys on the motorways and in London and provide out of hours primary healthcare to over one million citizens.

Serco is also a thought leader in the development of public private partnerships in the UK and around the world in particular through the Serco Institute Serco's research facility. The Institute monitors developments in public sector markets around the world, analysing and sharing best practice in competition and contracting – particularly in public service delivery. It provides a practical source of ideas and information derived from continuing dialogue with public officials, think tanks and academic researchers. The Institute's approach is pragmatic, drawing on the Serco's extensive experience – currently embracing more than 600 contracts in 30 countries – over some 40 years.

The examples shown in this note come from research and interviews carried out with managers and customers across Serco's business.

Context

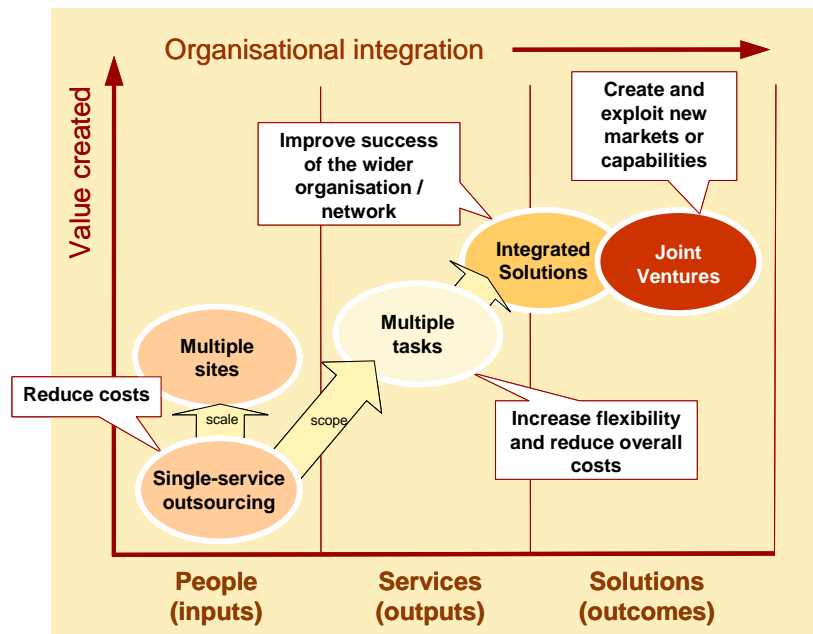
As the world's fourth largest economy predicting 9% GDP growth per annum, India has a great need for capital investment, infrastructure development and private sector funds and expertise. India has committed to spending 8% of its GDP on infrastructure investment of which some 20% or \$70bn has been earmarked for public-private partnerships (PPPs). As such, a tremendous amount of activity is now occurring in a variety of sectors from petrochemicals to power; from transport to urban regeneration; and investment may also be made in social infrastructure as well, such as health and education.

Governments around the world have used PPPs to drive the development of critical asset-based and social infrastructure for many years. However the value created by such a mechanism has without doubt varied widely. In order to maximise the value of PPPs, the partnerships formed between governments and the private sector have evolved over the past 10 years and increased in complexity. The drivers for this have been various, but at their heart lay a desire on the part of governments to extract more value from the money it is spending on public services.

To achieve this, the key change has been a move from contracting for inputs to contracting for outcomes. Early contracts defined a single service (such as cleaning or catering) or single asset (the construction of a road for example), all essential inputs to the delivery of an overall public service. The scope of such contracts then grew to encompass many tasks or to include maintenance with construction. Such a shift enabled greater economies of scope to be delivered and enabled through-life costs of infrastructure to be optimised. More recent developments have seen governments' contract for outcomes, asking the private sector to identify, design and build any physical assets that might be needed and include as many tasks as required to deliver the public service outcome (see Figure 1). Examples include fully serviced infrastructure such as hospitals, where clinicians simply need to turn up and work; prisons, light rail operations and traffic management systems that are designed, built and operated by the private sector; and social infrastructure such as schools where the private sector contracts to deliver improved examination results.

As India meets the challenges of developing an infrastructure fit to support its growth, extracting the best value from the private sector to ensure high quality public services and a legacy infrastructure fit for purpose will no doubt be a high priority.

Figure 1: Evolution of the PPP Market



Service-Led PPPs

Historically, PPP's have been concerned overwhelmingly with the construction of physical assets, and in many cases, procurement officials have not actively pursued innovation in service design. This approach has often resulted in cheap construction with little or no regard to the legacy or through life cost of the asset; a lack of innovation in the design hampering the delivery of the service for which the asset was built in the first place and has led to conflict between the procurer, constructor, maintainer and user of the asset.

Understandably, service providers believe that physical facilities are designed and built to assist in the delivery of a public service. A hospital exists to deliver health care; a school to provide education to students; a metro system to get people to work quickly and efficiently. To those who must manage the services in these facilities, day after day, year in and year out, it is self-evident that service design must be the priority from the outset. Given the long life of public service facilities, the overall value and importance of the service elements are often far greater than the upfront capital costs: design and construction might take three or four years, but the services lifespan is likely to extend to upwards of thirty or forty years.

As a result, an evolution is now being seen as the leadership of successful PPPs moves from the constructor through the maintainer to the service provider. The incentive for government to encourage this is strong; the builder wants to build the infrastructure at the cheapest cost to produce a compliant design; the maintainer will try to balance this capital expenditure with the best design life to produce the cheapest whole-life cost; but the service provider will look to maximise the cost effectiveness of the service delivery as a whole over the life of the infrastructure.

In other words, if the construction partner leads, the trade-offs will be made in favour of the building – resulting in cost-effective construction. If the maintenance partner leads, trade offs will be made in favour of maintenance – resulting in design solutions that need less maintenance, but which may not be most cost effective or fit for purpose in terms of service delivery. When the service provider leads a project, then the compromises that inevitably have to be made during the design and construction process will be made with a view to the ultimate effectiveness of service provision.

The Benefits of Service-Led PPPs

The philosophy is not difficult to grasp, and the benefits are now beginning to become more concrete, generally falling into three important areas:

1. ***Service input results in a design that is fit for purpose for longer.*** From a service provider's perspective, delivery is as much about how the service will work in several years time as it is about how it will look when the facility is first completed. Public services need to be flexible, to respond to changing service needs and policy priorities. There are numerous methods for building flexibility into contractual arrangements. However, the operational experts also try to factor flexibility into the design of the building where possible, and where it is likely to be beneficial to future service delivery.

For example, at one industrial prison the workshops were built in a fixed shape, as the work to be undertaken was known at the outset. But in practice the work is always changing, so the design of the building cut down on flexibility. In later establishments, a much more flexible design was used: huge workshops of that can be used by anyone, and can even be sub-divided, and offices created using portacabins. The creation of multi-use spaces in public facilities, making the building design more flexible to respond to whole-of-life service considerations, is

an innovation that would not have surfaced without input from operational experts: we have experienced the need to make expensive changes, and now we make it easier to change. We have an incentive to look for ways to be flexible.

Another example was the early appointment of the operating company, Serco Leisure, to enable input to the design of the Manchester Aquatics Centre. Together with the Council Serco were able to work with the Architects, Faulkner Brown, to provide a facility that not only provided a superb venue for the games but was also an efficient and effective building for its legacy purpose. The early appointment of the operating contractor resulted in the redesign of the reception, catering and ancillary areas in order to achieve the most appropriate flow lines of people through the building, with the primary focus being on future use with the Games being treated as an exception. For example, the basic design for spectator seating allowed for 1000 seats on a permanent basis but for the Commonwealth Games (or other really large events) there was the capability to increase the capacity to 2,500 using temporary seating, part of which would be built over the leisure pool. In another example, Flexibility was designed into the Centre from the beginning, including incorporating moving floors and bulkheads. Such flexibility allowed the lane swimming in a 50m or 25m pool required for the Games to be retained for other events but also to be alternated with unstructured recreational swimming in relatively shallow water.

2. **Early input of the service provider results in better design.** Design solutions that enable more efficient, effective provision of services also play a key role in helping service providers to manage risks and provide a safe and healthy environment for service users. Hospitals are a case in point; the quality of the fabric of the building is a key factor in preventing the spread of hospital infections. If you have a design that accumulates dirt, then the risk levels increase considerably. Cleaning and catering are incredibly important in establishments like hospitals. That's why you need cleaners and caterers involved in driving the building design. If the clinicians drive it, they won't understand how to make the building efficient and easy to manage, they won't know the places where dust can accumulate, or the features that make pest control more difficult.

Experts from the custodial sector said early consideration of the flow of people and goods had created significant service benefits in PPP prisons. Designing the prisons with a more efficient layout minimises the number of staff required to move prisoners around the facility, which makes the establishments less costly to operate. However, there are wider benefits: because it takes less time to move prisoners around the building, less time is lost from the 'regime' hours spent in training, education and other out-of-cell activities. There are therefore 'decency' benefits from design innovations of this kind. Similarly, simple steps such as locating showers and telephones on the housing wings have made PPP prisons more efficient than older facilities, since fewer staff are required to manage prisoner movement. It is also more convenient from prisoners' point of view, since they can shower or use telephones more easily, without having to be escorted there and back. This is in comparison with a prison designed by the public sector without the involvement of the service provider, which was:

"hugely over-specified; everything's on a large scale; it has lots of individual offices for staff, and those offices are quite a large size; there's lots of dead space – in the back office and even in the main jail; it's a long walk to anywhere, it's spread out, so it's expensive to run; the house blocks have lots of open space – which you have to heat... the noise reverberates around the space, so it's a noisier space; it's difficult to maintain – the ceilings are high, so how do you get up to change a light bulb?; the offices are divorced from the gates, so there are no sight lines..."

Experts from the defence sector also agree that people flows are integral to achieving the right building design. Describing one large – and highly successful – Ministry of Defence training facility built under a PPP, a former director of the service contract for the project said:

“The building is just for that – people flows – you have the accommodation on one side, then the central hub, with the refectory and library, then classrooms on the other side. So, in the mornings, the students get up and wash or shower, then they make their way to the refectory and then on to the classrooms. Then after classes finish, they go back again. The beauty of this arrangement, in terms of cleaning, for example, is that you can clean the refectory and kitchens, and the classrooms, for the morning, and then whilst the students are at classes, you clean the accommodation in time for the evening. This also saves on manpower, you don’t have to do all the cleaning at once, so you can have a smaller team”.

The same expert agreed that there are significant benefits to be gained from the right design. Understanding flows is important for every aspect of the service, from the movement of porters delivering goods and services around the building, to the movement of printing resources – paper flows – around the building. He added, *‘there’s no doubt that the service is improved by involving the service partners in the design – you know where you operate from and to’.*

Examples abound in many sectors including hospitals where service providers integrated an automated waste disposal solution into the design. Its value was not just as a practical solution to reduce the number of staff needed to deliver the service, it was also about risk-management; most needle-stick injuries are incurred by porters and cleaning staff, not doctors, when they are bundling up bedding. The automated solution helped prevent needle-stick accidents because less handling equalled less risk.

Involving service experts also makes it less likely that buildings are built that are not fit for purpose. One example is of a public courts building contracted under a design-build-maintain project, that did not include services:

“The company that lost the bid didn’t win because they didn’t appreciate that in designing the car park, they needed to separate the witnesses from the judges. But why would they? Without an expert on board, how would they know?”

- 3. Service leadership results in clarity of responsibility.** Many PPPs are now let as a single contract covering the construction, maintenance and service delivery for which the infrastructure is designed. Clearly the view of the service provider would be that ownership and leadership of the creation of infrastructure is critical to the effective delivery of service, otherwise the builders won’t have factored in the ongoing service considerations and the solution will be inappropriate for the service needs. But service ownership of the process has other benefits too. Having full ownership of the design encourages a more ‘can do’ attitude when tackling problems or mistakes that are discovered. Rather than blaming the design/build team for a problem, an operator with a stake in the design and construction of the project is more likely to look for solutions. The economies of scope and increased flexibility that come with a single contract provide more space for experimentation, which is often necessary in order to develop changes and improvements. With a service-led PPP all the risk sits with one party; and the operator is therefore more likely to go ahead with a new idea if they manage all the risks. If the project is split into different parts - construction, hard and soft services - there is more chance of conflict or blame-shifting if things go wrong, leading to a more risk averse approach.

Those interviewed were adamant that the kind of service innovations that are possible under the PPP – when services are included in the project as part of a whole package and the service provider involved from the outset – would not be possible if the design, build and hard FM and services elements were separated:

“What you get through PPP is a licence to innovate. All the risk sits with one party, so it’s a better environment to try new things, and also, you get economies of scope, so you have more flexibility – for staff to multi-task, for money to be re-allocated from one area to another and for all the considerations to be factored in together – so you get better value for money. That’s why you get better facilities – because it’s a total solution.”

One of the overarching benefits for clients from combining design, construction and services under one contract is that there is a single point of contact for all aspects of the service:

“It’s much more straightforward, and there are fewer hurdles to jump if you want to get something done... Government only has to go to one body for any defective services.”

The first advantages of a single point of contact come in the form of ease, time and efficiency of management – ‘management can spend time managing’. However, there are other benefits: with all the services under one lead, control and performance is more visible and fewer resources are expended dealing with disagreements or bureaucracy.

Conclusion

Public/Private partnerships are used widely around the world as a means of delivering high quality, cost effective public services, especially in economies that have a large and growing middle class with ever increasing expectations of quality.

As experience grows, the leadership of such projects is shifting from the builder to the maintainer to the service provider. As such, the focus is also shifting from reducing capital expenditure; to optimising through life cost; to cost effective delivery of public services. Service-led PPPs offer other benefits too: much more care is taken in the initial design of the asset or infrastructure to ensure that its legacy is ensured, that it remains fit for purpose for many years despite the changing needs of the public. Service-led PPPs often have very different designs as the service provider first designs the service delivery processes and only then creates assets if necessary to support the delivery of the service. And service-led PPPs enable governments to contract with a single entity to deliver public service outcomes. It becomes the responsibility of the service provider to integrate the design of processes, assets and technologies with the funding, people management and customer services. In this way complexity is reduced, more risk transferred and better public services delivered for longer.

Physical infrastructure is needed to ensure the delivery of a public service, but it should be the result of a service-led design process, not the centre of attention. The incentive to innovate in order to increase efficiency and improve service outcomes drives service providers to develop cutting edge solutions. The best opportunity for this comes when operational experts are involved from the outset, leading the project to design and build the facility that they will subsequently operate.

Infrastructure is after all built simply to serve.

Case Example – Manchester Aquatics Centre

The Commonwealth Games in 2002 was the biggest multi-sport event ever to be seen in the UK with more than 5000 athletes and officials from 72 nations travelling to Manchester to take part. Accommodating this event required a massive investment in the sporting infrastructure of the area, with many new sports facilities being constructed.

The first of these new venues to be completed was The Manchester Aquatics Centre, which opened to the public in September and was opened officially by Her Majesty the Queen in October. The centre, which cost £32 million, is the only complex in the UK to feature two 50-metre pools.

The main features of the Centre include:

- Competition Pool – 50 metres x 8 lanes x 2 metres deep with two floating floors and two submersible bulkheads.
- Training Pool – 50 metres x 4 lanes x 1.8 metres deep with one floating floor and one laterally moving bulkhead. This area is a self-contained unit with its own changing accommodation and its own suite of sports science and sports medicine units.
- Diving Pool – 25 metres x 16metres (6 lanes) with floating floor. Nine boards are provided – a pair of 2 metre springboards, a pair of three metre springboards, platforms at 1, 3, 5, 7.5, and 10 metres, the 10 metre platform being the first in this country to meet the new FINA specification of 3 metre width for synchronised diving.
- Leisure pool – with palm trees, spa, water jets, children’s slides and two white-knuckle flume rides.
- A Fitness Suite with 70 stations, Dance Studio and Health Suite complete the range of facility provision.
- An 80 cover Cafeteria sits to the rear of reception with a poolside terrace overlooking the main pool.
- Spectator Seating – 1000 seats are provided on a permanent basis but for the Commonwealth Games (or other really large event) there is the capability to increase the capacity to 2,500 using temporary seating, part of which will be built over the leisure pool.

Whilst the Commonwealth Games were obviously a catalyst for the creation of this pools complex, the Games only represented one month in its life. The Centre’s primary purpose was to provide first class facilities for Manchester and the North West for recreational and development use and to provide a venue which would encourage regional and occasional national and international events into the area. This was achieved through two main thrusts: firstly to design in flexibility to allow the Centre to provide facilities for far longer than simply the duration of the games; and secondly to make the investment in the Centre an explicit part of community regeneration.

1. ***Designing in flexibility to allow for long-term use.*** One of the most practical elements of the contract was the early appointment of the operating company, Serco Leisure. Together with the Council they were able to work with the Architects, Faulkner Brown, to provide a facility that not only provided a superb venue for the games but was also an efficient and effective building for its legacy purpose. The early appointment of the operating contractor

resulted in the redesign of the reception, catering and ancillary areas in order to achieve the most appropriate flow lines of people through the building, with the primary focus being on future use with the Games being treated as an exception. For example, the basic design for spectator seating allowed for 1000 seats on a permanent basis but for the Commonwealth Games (or other really large events) there was the capability to increase the capacity to 2,500 using temporary seating, part of which would be built over the leisure pool.

In another example, Flexibility was designed into the Centre from the beginning, including incorporating moving floors and bulkheads. Such flexibility allowed the lane swimming in a 50m or 25m pool required for the Games to be retained for other events but also to be alternated with unstructured recreational swimming in relatively shallow water.

2. ***Designing facilities for community regeneration.*** An important aspect of the purpose of the Centre was to help the Council with their regeneration programme by assisting the development of relationships with all members of the local community. Partnerships were successfully fostered with Residents Groups and Schools, religious leaders, Manchester Leisure's Sports Development team, the three Primary Care Trusts, the probation service and local interest groups. Through continuous consultation, Serco as operator gained the specialist knowledge required to enable them to offer programmes reflecting the needs and desires of the local communities. Specific programmes now offer single sex swim sessions, as well as sessions sensitive to ethnic and religious needs.

Furthermore, the Centre was seen as just one part of a citywide system of leisure facilities, and the needs of the community had to be dealt with by the entire system. As a result, Serco has worked closely with Manchester City Council to develop an action plan that saw the revitalising of all of Manchester's indoor leisure facilities - a vital aspect of the City's regeneration plan. One of Serco's initial programmes saw the investment of £8 million into a series of refurbishment projects to make centres throughout the City more welcoming and appealing. Serco replaced outdated fitness equipment with state of the art models and made a substantial investment in staff training. Also, an innovative programme of activities, including lane swimming, and Pilates classes, was launched and as a result, the number of swims and visits per thousand of the population increased by 22%.

Since the Games, the legacy value of the Centre has been proven; the number of swims and visits has increased by more than 50%, while the net cost has fallen by 18%. The now flourishing system of leisure centres plays a vital role in promoting community involvement, supporting social inclusion and reducing crime and disorder. Today, motivated staff and managers who have an understanding of the needs and desires of their users run Manchester's community leisure centres on a sound commercial footing.

Eamonn O'Rourke, Manchester's Head of Leisure says "What we have here is a superb example of partnership between Sport England, the consortium of the City Council, the three universities and our operator, Serco Leisure, working together for all levels of recreational and sporting interests. It has been a great success."