

PUBLIC-PRIVATE PARTNERSHIPS

# COST CONTROL & FINANCIAL AWARENESS IN THE OPERATIONAL PHASE OF PPPs



The Canadian Council for  
Public-Private Partnerships



Le Conseil Canadien pour  
les Partenariats Public-Privé



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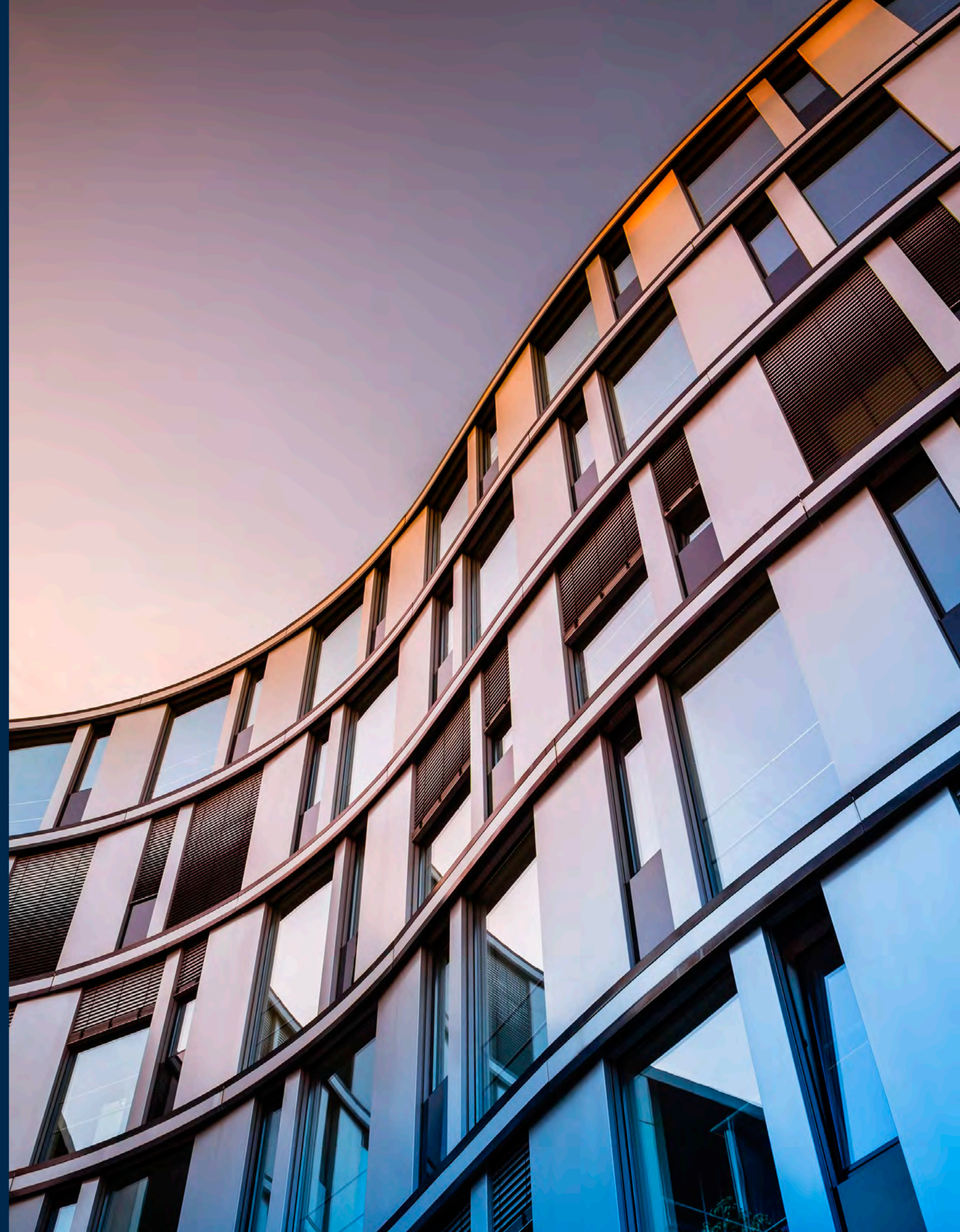
Editor: The Canadian Council for Public-Private Partnerships (CCPPP)



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## Table of contents

Executive summary.....	1
Introduction.....	2
Management of the operational phase: understanding the challenges .....	4
Developing a robust & effective partnership.....	5
Translating the contract into a clear performance management system.....	8
Understanding the benefits of accurate information & data .....	10
Adopting a user-friendly contract management tool.....	12
Conclusions & recommendations.....	15
Glossary.....	16

## Executive summary

**What is this white paper about?** With hundreds of new hospitals, schools, prisons, roads, bridges, railways, defence systems and government offices delivered using public-private partnerships (PPPs), the strategic priority is shifting from ‘doing deals’ to ensuring that the existing assets are being operated well. Here, we review the key challenges presented by the operational phase of PPP contracts and examine good ideas for addressing them, focusing on the aspects most relevant to the creation of strong, enduring relationships between the public and private sector parties.

**So, what are the challenges?** In most cases, PPPs are both lengthy and complex. Potential problems need to be identified, assessed and mitigated at an early stage, not responded to as they emerge. Preventative action begins prior to contract signature and continues on a regular basis throughout the project’s lifecycle. Indeed, empirical studies show that operational management will be most effective if the contracting parties ensure they have the right governance and information systems in place at the outset.

**Working in partnership is hard, but crucial** Challenges in the operational phase of PPPs are best addressed — perhaps, can only be addressed — when the contracting relationship is based on core principles of transparency, openness, mutual respect and co-operation. Evidence shows that gaps in the specification of contracts, and differences in their interpretation between the parties, cause an erosion in the partnership at the expense of delivery. Transparency needs to be sustained throughout, as the contract matures and processes of value testing test the strength of the relationship.

**Lost in translation?** The legal requirements of the contract must be translated — through an open, consultative process that is free of opportunistic behaviour by either party — into a performance management system that is clear and operationally relevant to everyone that needs to use it. High quality information about how the service provider will operate the contract, including its approach to operational management, must be available to all negotiating parties to enable a mutual sense of how service provision will be governed in the operational phase.

**The centrality of good information and data** Without ready access to accurate performance data, the public sector client is unable to monitor the private partner’s activities, comply with its contractual obligations or manage the risks it has retained. These gaps compromise value for money. The performance management system needs to incorporate and reflect the dynamics of operations — how events actually unfold in a complex operating environment in which circumstances, and the appropriate responses to them, can change rapidly. Only then does the client have confidence that it has documentation it can trust.

**Getting the right contract management tools** As the complexity of managing the operational phase of contracts has become more apparent, many service providers are moving from generic to bespoke performance management software. These often incorporate an integrated payment mechanism in which activities can be monitored in a transparent, auditable way through the use of remote monitoring and the running of abatement and performance reports. Such software can be an important part of establishing and maintaining sound management for new contracts — or be retro-fitted to existing contracts rapidly and without compromising operational efficiency.

**In conclusion...** A strong and enduring contractual relationship is needed to address the operational management challenge. This needs to be underpinned by clear contractual documentation, based on a mutually agreed interpretation of the contract, alongside high quality, objective and mutually accessible data on activities and performance. The operation of infrastructure in the modern era is a highly complex business — and success requires innovative solutions. We recommend that clients and providers utilise a management tool that places the relationship on a stable footing from the outset, and continues to protect the interests of all parties as projects evolve over the operational period.

# 1. Introduction

In many countries around the world, public-private partnerships (PPPs, or P3s) have become established as a successful way of delivering new public infrastructure and related services. In the most developed PPP markets, such as those of Australia, Canada and the United Kingdom (from which we draw much of the data in this report), the PPP model has enabled a transformation of the public realm, with private companies delivering hundreds of new hospitals, schools, prisons, roads, bridges, railways, defence systems and government offices, among many other things.

On average, PPPs — especially those configured as Design, Build, Finance, Maintain (DBFM) and Design, Build, Finance, Maintain, Operate (DBFMO) contracts — have delivered these assets with greater technical efficiency than would have been obtainable under traditional procurement approaches. Across jurisdictions, the significant cost and time savings that PPPs can secure in construction projects have been documented.<sup>1</sup> More recently, strong evidence has emerged of the ability of PPPs to facilitate stronger collaboration between private sector stakeholders than is typically achieved in conventional public procurement, and this has led to innovation in project delivery, cost savings and better value for taxpayers' money. The evidence for this is particularly strong in respect of the Canadian market.

A recent report by Altus Group<sup>2</sup> assesses and quantifies the cost savings attributable to innovation on social infrastructure projects in Ontario, Canada which use the Alternative Financing and Procurement (AFP) model, a made-in-Ontario PPP approach. The study focuses on the difference between the successful winning bids, unsuccessful bids, and initial project budget estimates. The analysis demonstrates that, for projects delivered through a design, build, finance (DBF) delivery mechanism, the expected cost savings attributable to innovation was between 5 to 12%; while for projects delivered through a design, build, finance and maintain (DBFM) delivery mechanism, the expected impact was somewhat higher, at between 11 to 18%.

With such a large proportion of public infrastructure built, maintained and in many cases operated under PPP deals, decision-makers' attention is understandably shifting from 'doing deals' to ensuring value for money in the long term. A key part of the promise of the PPP model is the focus on achieving value for money over the project's lifecycle, helping to avoid the widespread tendency of governments to underinvest in operations and maintenance (O & M) activities (see box overleaf). There is considerable evidence that this promise is being delivered in many countries. In Australia, for example, it has been found that PPPs can lead to cost savings throughout the project lifecycle of between 5% and 66%.

<sup>1</sup> This has been documented in Australia, Canada and the UK. See for example: Duffield, Colin F (2008), Report on the performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects, National PPP Forum – Benchmarking Study, Phase II; MNP LLP (2013), Alternative Financing and Procurement (AFP) Project Track Record Review, (commissioned by) Infrastructure Ontario; and National Audit Office (2003), PFI construction performance. London, UK: The Stationery Office.  
<sup>2</sup> Altus Group (2015), Assessment of Innovation through AFP Project Delivery, commissioned by Infrastructure Ontario.



Where a project falls within this range is crucially dependent on (i) how well the different phases of the deal are integrated and (ii) the extent to which the associated assets are effectively operated and maintained.<sup>3</sup> And, as experience across the world has accumulated, it is becoming possible to see how such integration can be achieved, and identify the management practices that regularly give rise to good outcomes.

## The challenges of lifecycle cost management in traditional procurement

In most jurisdictions, traditional procurement proceeds on the basis of short-term design and construction contracts with requirements specified on an input basis. The public authority holds the risk on construction delays and cost overruns, and pays for the costs of construction, maintenance and services as those costs arise. Capital costs are paid for at the beginning of the project through the allocation of capital budget. The most pressing objective, therefore, is to minimize that cost, rather than focus on the costs of operations and maintenance over the lifecycle of the asset.

In addition, in traditional procurement, payment for maintenance and services are generally not linked to performance, and there is no long-term contractual arrangement in place for the provision of maintenance. This allows public authorities to change their requirements (and the budget allocation to them) in terms of maintenance. Only a small number of authorities put in place planned maintenance regimes, and there is little to prevent these being abandoned in difficult times – for example, in periods of tighter public budget constraints. Predictable results of these arrangements are (i) the routine neglect of maintenance, and (ii) the failure to minimize costs over the lifecycle of the asset.

Source: HM Treasury (2012), A new approach to public private partnerships, London: The Stationery Office

Accordingly, this white paper aims to review the challenges presented by the operational phase of PPP contracts and explain how they are, and can be, addressed. The report builds on existing knowledge of operational management approaches, and focuses on those aspects that are most relevant to creating strong and enduring relationships between the public and private sector parties.<sup>4</sup> It is targeted at senior decision-makers in a global context: in both mature PPP markets (like those mentioned above), and also those who work in markets in which experience is at an earlier stage.

In facing up to the challenges presented by PPP contracts in their operational phase, decision-makers can enhance the performance of the projects they are managing, and ensure that new contracts and management systems are designed to secure the interests of all stakeholders.

<sup>3</sup> Commonwealth Department of Administration and Finance (2006), Introductory Guide to Public Private Partnerships. Canberra, Australia: Australian Government Printing Service.  
<sup>4</sup> There are a number of existing reports that focus on contract management approaches specifically for the public sector client. See, for example, EPEC (2014), Managing PPPs during their contract life: Guidance for sound management; and the most comprehensive guidance note: Partnerships Victoria (2003), Guidance Material: Contract Management Guide.





## 2. Management of the operational phase: understanding the challenges

Operating public infrastructure in the modern era is a complex business, irrespective of the model of procurement used. Yet the extent of complexity is especially marked for PPP contracts because of their longevity (most PPP contracts involve O & M concessions that last for 25-30 years or more) and their multi-faceted nature (the 'bundling' together of a wide range of related activities in the scope of a single transaction).

These are features, not bugs, of the model: they are necessary to provide the private sector that operates the PPP (usually established as a special purpose vehicle) with the capability and the incentive to generate efficiencies across the lifecycle of the asset.

However, these features also create challenges. Contracts that last a generation or more need to be flexible enough to accommodate change.

With this in mind, over time, authorities are increasingly pursuing a 'leaner' model of PPP in which the types of risks transferred to the private sector are fewer in number. In the UK, for example, there is now an explicit sanction against including "soft" facilities management services, such as catering, cleaning and security, in the bundle of tasks transferred from the public to private sector control. Risks associated with utilities and insurance costs are now also borne by the public sector client in new deals. In other mature markets, there is a recognition that long-term contracting for soft services is difficult, and may be costly (and creates unnecessary pushback from some unions). Hence, it is becoming much more common for these services to be stripped out of the 'bundle' that is contracted for via PPPs.<sup>5</sup>

It remains the case, though, that excellent management is needed to incorporate and respond to operational challenges in appropriate ways. A proactive rather than a reactive approach is required. Experience shows that problems need to be identified, assessed and mitigated at an early stage. Preparation for the operational phase must begin prior to contract signature and then be reviewed on a regular basis throughout the project's lifecycle. Indeed, it is becoming increasingly clear that operational management will be most effective if the contractual parties ensure that they have the right governance arrangements and the right information in place at the outset of the contract, if not before.

This means:

- Developing a robust and effective partnership
- Translating the contract into a clear performance management system
- Understanding the benefits of accurate information and communication
- Adopting appropriate performance management software

The rest of this white paper addresses each of these requirements in turn.

<sup>5</sup> Of course, this does not prevent the use of shorter-term contracts with the private sector for these services.



## 3. Developing a robust & effective partnership

The starting point for a robust and effective partnership is the documentation of the project agreement, which must be comprehensive, but also coherent, precise and usable. Technical and financial matters often dominate the negotiations during procurement — an understandable tendency given the interests at stake and the emphasis placed on "doing the deal." But the documentation also needs to establish sound governance arrangements for the operational phase.

As noted, a PPP is designed to deliver outputs, the achievement of which determines whether, or the extent to which, service providers get paid. Hence, the documentation must set out: (i) the main outputs to be delivered and how they will be measured, including clear key performance indicators; (ii) the planning, execution and monitoring of O & M activities; and (iii) the payment mechanism, including incentives and continuous improvement measures.

Even with these formally in place, the main operational challenges can only be addressed where the contracting relationship is based on key principles of transparency, openness, mutual respect and co-operation. At a minimum, this requires that a definition of responsibilities has been agreed prior to the commencement of operations, that there is high quality information available, and this flows seamlessly between the parties, so that performance can be assessed objectively and any necessary improvements identified.

In existing contracts, good communication and co-operation between clients and service providers have proved crucial to good operational performance. The importance of mechanisms that enable both parties to share information, discuss their views on project progress, overcome misunderstandings and avoid disputes has become ever clearer as deals have matured.

This is notable even in a comparison across national programmes. Empirical evidence shows that some countries have done better in promoting good partnerships than others, giving rise to varied performance in the operational phase. While in Australia and Canada, for example, challenges in contract management have often been dealt with in a spirit of openness and partnership (reflected in considerable support for the use of PPPs among public authorities and the wider public), similar outcomes have not been achieved in all jurisdictions, with implications for wider perceptions of the value for money of related programmes, and consequences for their political sustainability.<sup>6</sup>

Many weaknesses in contractual relationships have their origin in information problems. In particular, differences in the interpretation of contracts by the different parties have been shown to undermine good relationships. Empirical evidence shows this clearly. A study of PPP projects in Scotland, by Cambridge Economic Policy Associates,<sup>7</sup> found that the majority of their research participants that had been involved in disputes attributed these disputes to conflicting interpretations of contract requirements and lack of clear information during the development phase of the project.

Similarly, survey evidence from England<sup>8</sup> shows that by far the most frequent reason for disputes between public sector clients and service providers is over the interpretation of contracts. Of 125 public sector organizations involved in PPPs surveyed by the National Audit Office, a third cited differences in interpretation as the main reason for disputes. In addition, a number of contractors informed the audit office that where authorities were inflexible and not taking a practical approach to the interpretation of the contract this had caused damage to the relationship. The evidence suggests that relationships have worsened where the spirit of partnership has not been carried through from the procurement to the post-contractual stage, and one of the parties to the contract believes that the other is interested in pursuing self-interested objectives.

<sup>6</sup> For further evidence of the scale of public support for PPPs in Canada, see: [http://www.pppcouncil.ca/web/pdf/nanos\\_infrastructure\\_survey\\_02192016.pdf](http://www.pppcouncil.ca/web/pdf/nanos_infrastructure_survey_02192016.pdf)

<sup>7</sup> Cambridge Economic Policy Associates (2005) Public Private Partnerships in Scotland: Evaluation of Performance. Final Report. Cambridge Economic Policy Associates Ltd.

<sup>8</sup> Source: National Audit Office (2010), The performance and management of hospital PFI contracts. Comptroller and Audit General. June 2010. (House of Commons: The Stationery Office).



Information problems as an impediment to good service

(1) Private Finance Initiative (PFI) hospitals in England

In a 2010 report, the National Audit Office found that healthcare authorities in England which had concerns about performance were less likely to have a positive and open working relationship with service providers and tended not to see the contract as an enabler of effective partnership working. Conversely, 79% of the healthcare authorities surveyed by the audit office said that when the strength of their relationship with service providers had improved, value for money had also improved. In general, the report found that healthcare organizations and service providers had positive relationships, but a third rated as deficient in at least one important aspect their relationship with their hotel services provider and no less than half rated as deficient their relationship with their maintenance provider. The report found that, although most working relationships were functional, none had developed beyond a traditional client-supplier relationship. There had been little partnership working, and little effort to work together to find performance and efficiency improvements that are mutually beneficial.

Source: National Audit Office (2010), The performance and management of hospital PFI contracts. Comptroller and Audit General, June 2010 (House of Commons: The Stationery

(2) The New Schools Privately Financed Project in New South Wales (NSW), Australia

This AUS\$137 million schools project was the first social infrastructure PPP commissioned by the NSW Government. It consisted of the design, build, finance and operation of nine new schools. The first tranche was delivered on time and to budget in 2004, and the second tranche in 2005. In a post-implementation report, the NSW Treasury found that the help desk (provided by the private partner's facilities management subcontractor) was in some cases closing off jobs when these had not been completed to the school principal's satisfaction, and these jobs were then being re-issued under a new number. Clearly, this also had flow-on implications for the public sector client's ability to levy deductions (although there was no evidence of any dishonesty on the part of the private partner). The issue arose because of gaps in the operational procedures documentation: the circumstances in which a job could be closed, re-opened and/or re-issued had not been clear enough in the original documentation and, in the opinion of the Treasury reviews, needed to be clarified. The case shows how misunderstandings based on a lack of clarity might undermine the achievement of planned outcomes, and damage the partnership. Here, the right lessons were learned. Subsequent contracts let under the programme were able to reflect on this experience, to ensure that clearer and more effective contract documentation would underpin growing trust between the partners.

Sources: New South Wales Treasury (2005), New Schools Privately Financed Project: Post Implementation Review, Sydney, Australia: NSW Government



Experience has shown that the interests of public sector clients and service providers can be threatened as they experience and work through various challenges in the early years of the contract. At a time of fiscal constraints, in which increasing economic and political pressures have resulted in more intensive scrutiny, many public sector clients are keen to demonstrate auditability. In order to do this, excellent information and data are needed to demonstrate the scale of contracted activities, the accuracy and security of the performance regime, and the value being produced by the contract.

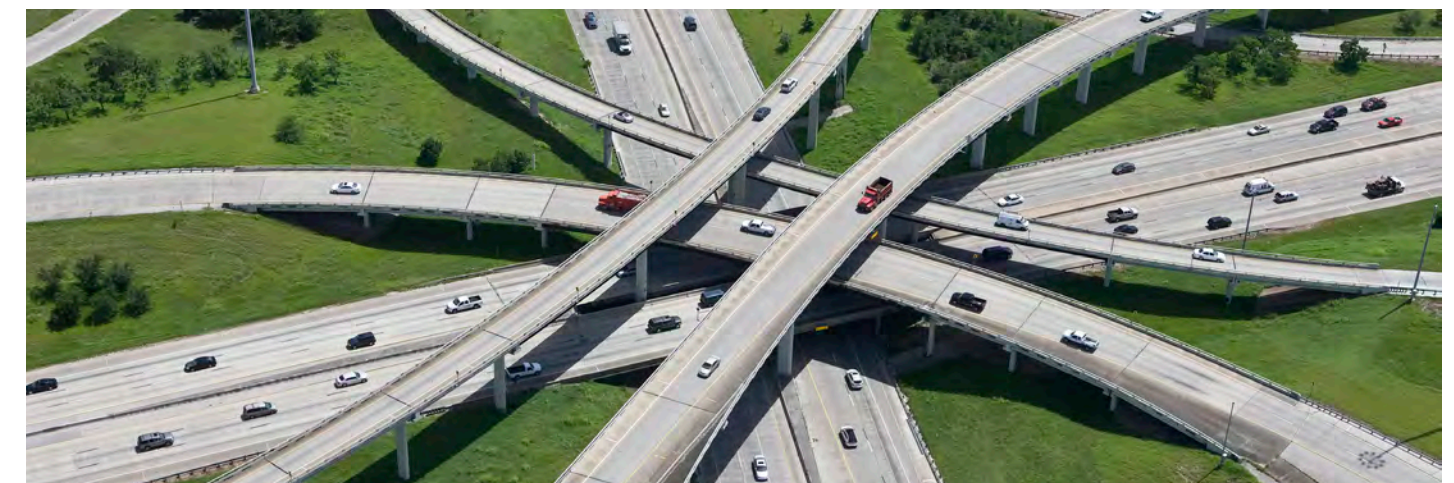
In this environment, opportunities to change output specifications and contract terms are being closely considered by many public sector clients. In some jurisdictions, the process of value testing is becoming an important aspect in achieving value for money in the operational phase. This may involve comparing information about the current service provider's provision with comparable sources (benchmarking) or, as has become more frequent in recent years, inviting other providers to compete with existing providers in terms of the combination of price and quality they can offer (market testing) (see box opposite). The success of such processes from the perspective of all stakeholders is dependent on the quality of information. For the public sector, there is a requirement that the process is transparent and evidence-informed. Equally, it is in the service provider's best interests to ensure that reliable data exists of the scale of its activities and the value they are producing — within and without the formal scope of the deal — and to ensure that changes and local (mis-) practices have not crept into operations and become the common standard.

Testing value; testing the strength of the relationship

**Benchmarking:** The process by which the private sector consortium compares its own costs or the costs of its subcontractors against market norms. If the costs are higher than market prices, a reduction in the price charged to the public sector should be made on an agreed cost-sharing basis to reflect the differential. If costs are lower than market prices, the consortium must justify any price increase.

**Market testing:** The re-tendering by the private sector consortium of the relevant service so that the public sector client can test the value of that service in the market. Any increase or decrease in the cost of such a service following market testing should be reflected by an adjustment in the price charged to the authority.

Working in a collaborative and flexible way when dealing with value testing — and, indeed, to other forms of contractual change — are often absent in projects where relationships have worsened since the contract began. By comparison, the outcomes for both parties are better where both parties to the contract have understood what is required of them, have understood each other's objectives, have taken a collaborative approach to the need for change, and have trusted each other to work towards a common goal. This highlights the importance of identifying areas of potential misinterpretation and addressing any omissions in contracts, and of basing the partnership on high quality information that is available and relevant to all stakeholders.





## 4. Translating the contract into a clear performance management system

A sound performance management system is at the heart of the PPP contract. If the required outputs — e.g. in the form of key performance indicators (KPIs) — are well specified and measurable, and adequate arrangements are in place for monitoring and verifying performance, then any failure of the service provider to achieve specified outcomes may result in them sustaining financial losses. This possibility — whether or not it is realised — generates a powerful incentive for them to deliver on the goals of the transaction. Because performance mainly concerns the operational aspects, it is important to ensure that the mechanism specified in the contract can be applied in practice for effective, appropriate operational management. Again, this issue should be addressed prior to contract signature, ideally during the procurement phase.

The payment mechanism should incentivise the service provider to deliver the right level of performance, without unnecessary and costly over-performance, and provide a clear framework for penalties to be applied if it fails to do so. Hence, the calibration of the payment mechanism is central to the achievement of value for money. A balance needs to be struck among the variables in the mechanism, such as the initial weighting of deductions for failures, response periods, and ratchets. A balanced payment mechanism is one in which deductions are sufficient to ensure that the provider is incentivised to perform, but not so punitive that they encourage excessive risk pricing by private partners, and / or affect the availability of finance.

Inadequate performance information and mechanisms may result in a weakening of the service provider's incentive to perform. Where such inadequacies result in a deterioration of the relationships between the client and the service provider, this is likely to impact on the service being delivered and reduce the value for money of the deal. Insufficient resources, including human resources

(staff capacity, skills, recruitment and retention) or inadequate financial capacity to manage or procure the contract effectively, will have a similar effect. Finally, failure to put in place robust systems to monitor and manage ongoing risks to the delivery of the service may threaten the economic value — and perhaps the affordability — of the contract.

### Key features of an effective payment mechanism

The key features of an effective payment mechanism are:

- all the major elements of service delivery should be covered by the regime and given a weighting linked to their relative importance
- no payments should be made until the contracted service is available
- there should be a single payment from the public sector client for the service, which is not made up of separate independent elements relating to availability or performance
- the single payment should only be paid to the extent that the service is available (for example proportionate to the number of available places or units)
- it should seek to make deductions for substandard performance so that the contractor is incentivised to rectify the problem. Deductions should reflect the severity of service failure.

Source: HM Treasury (2006), PFI: strengthening long-term partnerships, London: The Stationery Office

Partnership working to design the payment mechanism during procurement negotiations reduces the likelihood of opportunistic behaviour during the operational phase. To protect the interests of all stakeholders, each of the main counterparties needs to understand the objectives and businesses of the other before the deal is signed. In some

cases, the pressure to reach a deal during procurement can be too great — and clients and providers agree to contracts without reaching a clear, mutually agreed, understanding of how some of the complex issues in the contract should be dealt with in practice. Such differences will be minimized if the counterparties have taken the time to discuss and document how contractual terms are to be interpreted before the contract is let. Indeed, the key to a successful relationship is to ensure that the legal requirements of the contract are translated into a performance management system which is clear and operationally relevant to all users.

### Principles into practice: three examples of projects with effective payment mechanisms

**Durham Consolidated Courthouse:** Access Justice Durham (the private partner) put forward an energy consumption target in their bid. They are responsible for managing energy consumption within 5% of that target. If energy use exceeds that target by more than 5% the private partner must pay for it, while savings realised from energy savings beyond 5% are shared between partners.

**Abbotsford Regional Hospital and Cancer Centre:** The first major PPP hospital in British Columbia (BC) had to specify performance and facility management requirements to ensure value for money over the term of the agreement. As is typical in effective availability-based PPP contracts, payments to the private sector only began when construction was completed, providing a strong incentive to finish construction on-time.

**The Canada Line:** TransLink makes performance payments to InTransitBC based on availability, quality of service and achievement of ridership forecasts. InTransitBC is answerable for performance requirements including operating hours, train frequency, travel times, service staffing, cleaning and maintaining vehicles, environmental management, customer relations standards, and customer service response time.

Source: The Canadian Council for Public-Private Partnerships

Ideally, the supplier of performance management software (see sections 5 & 6) should be involved in this process to enhance the quality of information available to the parties involved in negotiations, and enable the public sector client, in particular, to have a clear sense of how the contract will be implemented during operations. By engaging with the negotiations relating to performance management at this stage, the software provider is able to better understand the service provider's requirements, culture and expectations as well as the expectations of the authority and its key staff. Similarly, by attending bid meetings, expectations of both parties around the payment mechanism documentation can be robustly discussed, resulting in a clear vision of expected outcomes, potential issues and areas of concern which can then be addressed early in the process.

In addition, the public sector authority gains a great deal of insight from understanding how the payment mechanism will operate as part of the performance management software and this is often an excellent time to analyse clauses in detail and apply a 'common sense' approach that is agreed by all. This gives the client the necessary reassurance that they will be able to monitor and obtain information from the performance management software once the contract is operational. By taking this approach, a partnership relationship is fostered and developed at an early stage, resulting in a higher level of mutual trust.

One of the main challenges of PPPs is the long period between the bidding stage (when the negotiations take place) and the point at which the contract becomes operational and service provision begins (when the parties have to make the contract terms agreed in the negotiation, which can also be subject to a number of changes over the period, actually work in practice). Having an agreed, and objective, interpretation of the contract is crucial to deal with these complexities, and the performance management software can be key to avoiding problems of interpretation, communication and the adversarial relationships that may otherwise develop.



## 5. Understanding the benefits of accurate information & data

Without ready access to accurate information and data on service performance, the public sector client is unable to make sound decisions, monitor the private partner's performance, comply with its contractual obligations or manage the risks it has retained. In a typical PPP, most data on service performance is collected and owned by the service provider. Wherever possible, the client should impose on the service provider an obligation to provide regular reports on its performance, and the tasks that have been carried out during a given period. As the client is dependent on this information, it must be capable of verifying its accuracy and consistency.



### Capturing the benefits of partnership: retendering Alberta's highway maintenance contracts

Alberta Transportation is internationally regarded for the effective way it has contracted for highway maintenance. Key to its approach has been the strength of the partnership it has fostered with its maintenance partners in successive rounds of contracts. The concept of partnering was built into the first round of contracts in the late 1990s, with the parties to each contract developing a set of common values, goals and objectives during a facilitated workshop, and agreeing "to act honourably and ethically towards each other" throughout the term of the contract. During the contract period, the authority continued to foster a good working relationship with the contractors by including them in almost all of its working groups on maintenance and roadway operations. In 2000, when the public authority needed to retender the contracts, it decided to review the entire process, aiming for higher savings and more innovation, and moved towards a more output-based PPP/P3 approach. Alberta Transportation and the industry jointly redeveloped the tender process in order to address the objectives of both parties. Since then, performance standards have been consistently high. A new performance measurement system was effective in promoting quality and excellence and all contractors scored highly in the process. The proactive partnership between the authority and the industry was built on good information and clear communication and turned what was, at times, an adversarial relationship in the late 1990s into a more successful partnership approach. The authority was willing to include the contractors in the process and actively hear, not just passively listen to, what they had to say about improving the process. The contractors were willing to commit significant time and energy to an onerous process, with no guarantee of reward. Both partners had the common goal of removing any barriers that could prevent either from achieving the best results. The second round of contracts resulted in significant cost savings, estimated at CAN\$241 million over the five-year contract period.

Source: The Canadian Council for Public Private Partnerships

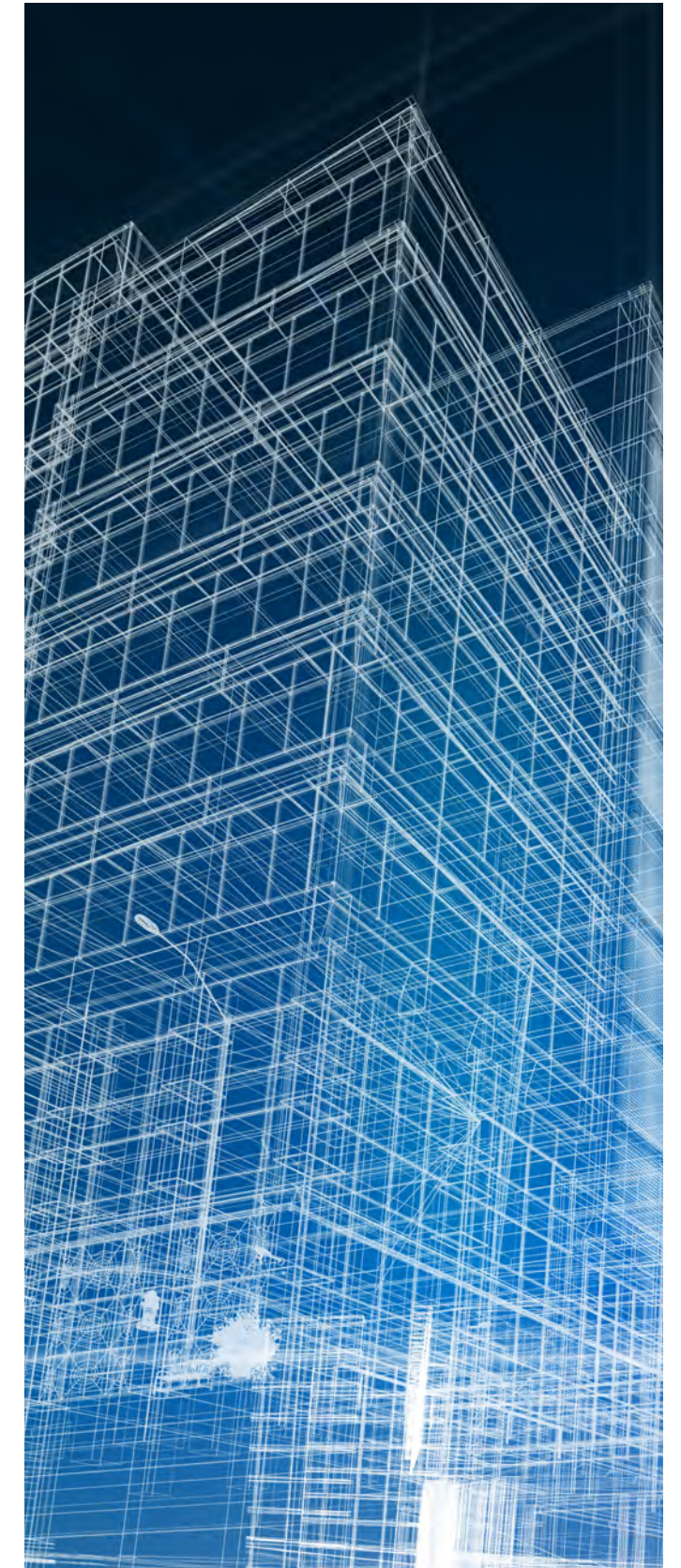
The achievement of risk transfer to the private partner is dependent upon effective performance measurement and assessment. Audit evidence from the UK has shown that, historically, only a small percentage of projects have seen penalties being applied to payments for reasons of underperformance.<sup>9</sup> Public sector clients are often willing to forego the levying of penalties in order to sustain good working relationships between the partners, and are prepared to balance underperforming services with other services rendered. In such cases, the mere threat of applying abatement may have the desired effect by providing sufficient incentive for the private partner to improve its performance in line with the contract and service specifications.<sup>10</sup> However, that threat is only credible in the presence of a good performance management system.

This must ensure that the service provider's performance can be measured, checked, and signed off. Such a system needs to incorporate and record accurately the dynamics of how events actually unfold. The evolution of instances of, for example, unavailability, or of other service problems, can be very complex. An event may begin as a broken window but later develop into a broader problem of vandalism. A system must be in place that will record changes and any instructions that relate to them.

Such a system must also provide an audit trail in which such changes are date / time stamped and logged, giving the client confidence that it has documentation it can trust. The authority must be able to view this in real time to ensure that things are happening in accordance with the contract. Auditors will also want to see an event and follow this through to the penalty, and they must have a complete record of what has occurred and how this has been resolved through the contract.

<sup>9</sup> National Audit Office (UK) (2009) Private Finance Projects. London: HM Stationery Office.

<sup>10</sup> Ernst and Young Accountants (2008) The Journey Continues: PPPs in Social Infrastructure. Ernst and Young Accountants, Australia.





## 6. Adopting a user-friendly contract management tool

The best way for the public partner to hold its private partner accountable for performance is through the continuous application of an effective contract management architecture. Clearly, without a strong understanding of the service delivery environment, the public sector client will be unable to evaluate and verify operational performance. Most service providers involved in PPPs use software packages to manage their activities in the operational phase. Many use generic solutions — at least, many have done so historically — but experience has shown the limitations of these packages, especially from the point of view of the public sector client.

In its report on hospital PPP projects in the UK, The Committee of Public Accounts concluded that contracts were achieving the value for money expected at the point they were signed. However, a lack of good quality, centrally held, performance and cost data during the operational phase was undermining the ability to monitor performance, to drive efficiency savings and improve value for money in the long-term.

The performance under the contract cannot be effectively managed if performance data are not being accurately reported. Therefore, the public sector client needs to take a 'hands on' role in the selection of tools to be used by service providers, which will have a material impact on the quality of the information and data on performance to which they have access. During the procurement stage, they should discuss with the service provider which software solutions they are planning to use and ensure that they are capable of generating reliable and accurate data on a regular basis.

As noted above, the operation of public infrastructure is complex in the modern era. Hence, modern solutions are required, so that contracts can incorporate and respond to that complexity in appropriate ways. For service providers, appropriate tools are those that allow it to monitor, forecast

and avoid unnecessary deductions to the benefit of their own financial performance and their ability to continue to provide value for money to the client.

As the complexity of managing operational PPP contracts has become better understood, many service providers are moving from generic to bespoke performance management software, incorporating an "integrated payment mechanism" in which the performance of the service provider is monitored in a transparent manner through the use of remote monitoring and the running of abatement and performance reports. To some, this may seem to be a relatively arcane issue — but, in fact, the level of functionality this secures is fundamental to ensuring that providers can monitor, forecast and avoid deductions and that clients have the transparency and auditability they require to assess, and to demonstrate, value for money. Without an integrated, real-time payment mechanism there is limited access to information sufficient to allow providers to take steps to predict penalties, viewing potential threshold breaches with speed and accuracy. This restricts the ability of the provider to respond proactively to emerging problems and provide excellent value for money to the client.



### Protecting the value of the partnership for all stakeholders: the benefits of integration

**Capturing the dynamics of availability:** In an "availability-based" PPP contract, payments should be made to service providers as, when and to the extent that, assets are made available for the client's use. This sounds straightforward, but operationalising the concept of availability can, in fact, be complex. There are cases where the unavailability of one part of a facility leads to the unavailability of another. For instance, a sports hall is of limited value to the school if the changing rooms are unavailable for use — an example of consequential unavailability. There are other cases where part of a facility may be notionally available for use, but is of a standard where such use is either hampered or unsafe. For instance, a road may be notionally open for travel, but is of a standard where such travel is either hampered or unsafe — an example of deemed unavailability. In both cases, arriving at the right deduction is hard to achieve with generic software.

There are instances where the unavailability of one critical part of a facility may render an entire zone or cluster unavailable once a defined threshold has been breached. This process can develop rapidly and can change multiple times over the course of a day, a week or a month. So the payment mechanism software needs to be able to calculate the exact time that one, two, or three rooms are unavailable and are then put back into availability — and change the deduction accordingly. Generic software cannot do this.

**Mitigating the financial impact of repeat 'ratchets':** In most PPP contracts, the longer a problem persists and/or the more frequently it occurs, the bigger the penalty. For instance, an accumulation of performance points owing to repeated events eventually leads to a deduction. As this can ratchet over several months, the payment mechanism must establish whether another failure in the same area with the same performance indicator has occurred within the relevant period. It will apply a different deduction depending on the number of times this repeat failure or threshold has been breached. There can be complex rules surrounding the definition of a repeat event, and it may not be based on the same indicator in the same area. In generic software, in which problems across many months may be recorded across multiple spreadsheets and there is no clearly identifiable 'running total', it can be difficult to monitor the position of the service provider in relation to the thresholds. That undermines the service provider's ability to mitigate the risk of losses to income. Adequate mitigation of this problem requires a real-time system

**Demonstrating the real value of the contract:** As a partnership develops and matures, there may be important elements of service provision that are outside the formal scope of the contract. Such elements of service provision may consume substantial resources: any action which is beyond the contract remit has an opportunity cost in terms of taking resources away from contracted activities, and can ultimately have an impact on deductions. But the existence of these elements and their importance are often missed when reporting operates on generic software. Their neglect may occur because they are perceived as having no monetary element attached to them — but in reality they can have a big 'silent' impact and should be recognised. Unlike in a generic application, an integrated, real-time system records these activities transparently and securely, giving the service provider a clearer view of how much it costs to provide them. Many contracts have provisions that require the value of 'soft' facilities management services, such as catering and cleaning, grounds maintenance, litter picking and car park management, to be compared against market norms at intervals of five to seven years, either through benchmarking or formal market testing (see page 7) - and in either case, it is in the provider's best interests to ensure that an objective record exists of the scale of the activities and the value being produced by them under the contract.

**The technical efficiency benefits of a user-friendly tool:** Generic payment mechanisms are costly to operate. Their operation is a full-time process that leads to sizeable opportunity costs in terms of the specialist human resources required. There are risks, too. To operate the payment mechanism manually, a considerable amount of expertise and experience is required that is contract-specific. As people move on, and new people come in, crucial knowledge about the complicated and interconnected nature of the spreadsheets may not be readily available, raising the likelihood that inaccuracies and discrepancies will occur. With an integrated payment mechanism, in contrast, the need for highly specialist human resources is limited, such that the smooth-running of the system is sustained over the entire contract period.

For more detailed coverage of these issues, see Service Works Group's previous white paper, *Delivering Better Value for Money Through PPP Payment Mechanisms*



Where a PPP contract does not incorporate an integrated payment mechanism, many stakeholders are now considering a retrofit. This is the process of moving from generic to bespoke, integrated payment mechanism software, usually during the PPP contract's operational phase.

The benefits of retrofitting apply at any point in a project's operation. This technology can be used to identify and address problems in the existing operation of the contract and review and clean the existing data - thereby creating efficiencies in maintenance and service provision, increasing flexibility, and enhancing the quality of the partnership apply at any point in a project's operation. However, there are particular moments in a project's life where a retrofit is particularly valuable. For example, where contracts are due to be value tested (as outlined in sections above), or, indeed, otherwise re-negotiated (as policymakers in some jurisdictions are particularly keen to encourage, reflecting the fiscally strained nature of the times), a retrofit can help to ensure that changes and local (mis-) practices have not crept in and become the common standard.

Whatever motivates the move from generic to bespoke software, the process is an opportunity to breathe new life into the relationship: to review the original contract documentation, the adequacy of current information systems, to decide what can be used and what needs to be discarded, to introduce new technologies and improve workflow. For the service provider, it should be seen as an opportunity not just to save on cost or address risks but to enhance value for money — to make manifest to all stakeholders the scale of the value it is producing, and to identify additional services that could be delivered to the benefit of both parties. The requirements and preferences of the public sector client are certain to shift in the scope of a long term PPP contract, and their success depends on continuous reflection, renewal and innovation.

Equally, a public sector client will need to see evidence of continual improvement, and service providers can more readily demonstrate this improvement through an integrated payment mechanism. And because the integrated mechanism can be developed fully while the existing system continues to operate, the transfer from the old to the new application can take place rapidly and without compromising operational efficiency.



## 7. Conclusions & recommendations

Increasingly, empirical evidence is showing how the PPP model can deliver value for money in the operational phase, just as previous data has highlighted the capacity of the model to deliver innovation and consistency in the construction phase. As experience has accumulated, it has become possible to identify the challenges that the operational management of PPPs can generate, and how the quality of the responses to these challenges determines value for money outcomes. This report has sought to review these challenges and the positive responses to them. Key themes that emerge are: (i) the importance of strong and enduring contractual relationships in addressing complexity and managing longevity; and (ii) the importance of high quality and mutually accessible information as a key pillar of robust, but collaborative, contractual relations.

This white paper shows that good information is required to protect the interests of all stakeholders. Public sector clients will protect their interests better when they have transparency in terms of the service provider's performance — so that accurate and secure information about the availability of the assets and the quality of services is accessible across the contract lifecycle, and at critical events in the evolution of the deal, such as when the auditors are called in, or when contracts are value tested. The service provider, too, needs ready access to accurate and up-to-date performance information — to ensure that it can reduce or eliminate the potential for financial losses and demonstrate the scale and quality of services outlined in the contract.

To achieve these things, we recommend:

- That planning for the operational phase takes place as early as the procurement stage, so that all parties understand clearly of how the contract is to be implemented
- That agreement on how the key contract terms are to be interpreted is achieved prior to the onset of the operational phase, so that all parties have agreed and understood these
- That all parties prioritize the creation of sound information and data as a central pillar of the transparency, openness, and co-operation that all effective partnerships require
- That the complexity of the operational management of modern infrastructure is recognised by all stakeholders, and is addressed via modern technology solutions
- That service providers understand the importance of an integrated payment mechanism in protecting interests and managing risk over the longevity of the contract
- That clients and service providers understand, and grasp, the opportunities of moving from generic to bespoke software solutions at any point in the project's lifecycle.



# Glossary

Availability	The ability of a project to make its service (e.g. the accommodation required in a PPP) available; deductions are made from payments to a service provider if availability requirements are not met.
Capex	Capital expenditure — the build cost of the building contractor or supply chain contractor.
Commercial Close	The point at which agreement is reached on all the commercial terms of the project agreement.
Concession Length	The duration of the contract from financial close.
Consequential Unavailability	It is sometimes appropriate for the unavailability of one part of a facility to lead automatically to the unavailability of another that is reliant on it. For example, a sports hall in a school is of limited use if changing rooms are unavailable.
DBFO	The acronym applied to Design, Build, Finance and Operate contracts. This is the technical term used to describe PPPs in the accommodation or transport sectors, where the majority of risk is transferred to the private sector.
Deemed Unavailability	This covers circumstances where a facility may be notionally open for use, but is of a standard where such use is hampered or perhaps unsafe.
Design & Build	The contract to design and build a facility or a piece of infrastructure that delivers the performance specification in the PPP contract.
Due Diligence	The process of assurance / validation of information provided in connection with a PPP, prior to entering into binding agreements, or undertaken prior to a retrofit of performance management software.
Equity	Ordinary share capital invested in the project company by the sponsors and any third party investor, along with loan stock or loans made by shareholders. Equity has the last claim on a project's income, and bears the highest risk.

Facilities Management ("FM")	The provision of services ranging from catering and cleaning (soft FM); to minor repairs, decoration and major maintenance and replacement (e.g. of heating systems) (hard FM).
Financial Close	The point at which all contract documents become legally binding and the financing for the project is available. It is at this point that the main contractual terms for the project are fixed.
Handback	Refers to the return of project assets to the public sector at the end of the contract. Typically, the contract specifies the condition in which the project assets must be in at the point of Handback — and it is the project company's duty to ensure that the assets meet these conditions.
Hard FM	The maintenance and replacement of building components (e.g. roofs, heating equipment, windows, lamps, doors) when they can no longer provide the performance specified in the contract.
Key Performance Indicators (KPIs)	These are the measures of service standards defined in the PPP contract. Failure to meet these leads to deductions or performance points.
Lifecycle	The replacement of the components of a building so as to ensure asset performance meets required standards over the contract period.
Local Practices	These are practices that have developed during the operational phase of the contract which are not defined in the contract and are therefore not adequately captured by the original performance management regime and payment mechanism.
Mitigation Meetings	Meetings at which a decision is taken by the contracting parties to exclude certain events from the deduction schedule.

Output Specification	The requirements set out by the authority in terms of what they want to achieve through the project are defined as 'outputs', leaving the private partner to decide on how best they will combine 'inputs' in order to deliver those requirements. The services detailed in the output specification should be capable of objective assessment so that the performance of the private partner can be accurately monitored.
Payment Mechanism	The means by which payments due under a contractual structure are calculated, including the deductions for sub-standard performance, or non-provision of services. An "integrated" payment mechanism is a software application that automatically calculates deductions from events that have been entered into the system.
Performance Points	Poor service will incur performance points based on KPI weightings. The accumulation of points eventually leads to a unitary charge deduction.
Private Finance Initiative (PFI)	The Private Finance Initiative is the name given to the programme of Design, Build, Finance and Operate (or Maintain) contracts used by the government of the United Kingdom. The PFI is the principal form of PPP applied in that country.
Project Agreement	This is the main contractual document in respect of the PPP which requires signature by the authority and project company at financial close.
Public-Private Partnership (PPP)	May describe any form of partnership between the public and private sectors for the provision of services. However, in this white paper, the term is used specifically to refer to Design, Build, Finance and Operate (or Maintain) contracts.

Public Sector Client (or 'the client')	The public sector entity that procures the project and acts as the ultimate client through the construction and the operational phases of the deal.
Ratchet	A ratcheting mechanism within the performance management system ensures that more 'performance points' are imposed the longer a problem persists, or if problems are repeated (repeat ratchets).
Retrofit	The process of moving from generic to bespoke, integrated payment mechanism software, usually during the PPP contract's operational phase.
Service Providers (or 'the provider')	A company set-up solely to carry out a specific project. This allows the operations of the company to be ring-fenced from other activities. It may also refer to a subcontractor — that is, a company that provides services, such as design and build or soft FM, for the main contractor.
Soft FM	This describes certain services such as cleaning, security, portage, grounds maintenance, catering, litter picking and car park management.
Unitary Charge	The payment made by the public sector client, under the terms of a PPP contract, which provides a revenue stream for the service providers for fulfilling its contractual duties.



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Service Works Group is an international expert software solutions provider that have revolutionized the market in PPP (public-private partnership) service delivery and operational performance management software.

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