

EUROPEAN PPP EXPERTISE CENTRE

Ex-post assessment of PPPs

and how to better
demonstrate outcomes

October 2018



European
Investment
Bank



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Abbreviations and acronyms

4Ps	Public Private Partnerships Programme for UK local authorities
CA	Contracting Authority (i.e. public authority)
CCPPP	Canadian Council for Public-Private Partnerships
DBFMO	Design, Build, Finance, Maintain and Operate
EC	European Commission
ECA	European Court of Auditors
EIB	European Investment Bank
EPEC	European PPP Expertise Centre
EPPP	[Chaire] Economie des Partenariats Public-Privé, France
ERIC	Estates Return Information Collection service, UK health sector
IAE	Instituts d'Administration des Entreprises, France
IFI	International Financial Institution
ISSAI	International Standards of the Supreme Audit Institutions
IT	Information Technology
KPI	Key Performance Indicator
LEA	UK Local Education Authority
MAPPP	Mission d'Appui aux Partenariats Public-Privé, France
MoD	UK Ministry of Defence
NAO	National Audit Office, UK
NPD	Non-Profit Distribution programme model
OBC	Outline Business Case
OGC	UK Office of Government Commerce
PF2	Successor programme to UK PFI programme
PFI	Private Finance Initiative, UK
PPP or P3	Public Private Partnership
PSP	Private Sector Partner
SAI	Supreme Audit Institution
SFT	Scottish Futures Trust, UK
SME	Small and Medium-sized Enterprise
SPV	Special Purpose Vehicle (see also PSP)
TPA	SFT's Territory Project Agreement for Hub projects
VfM	Value for Money

Glossary ¹

Contracting Authority	The public authority (usually being a State, regional or local authority, body governed by public law or association formed by one or more such authorities or one or more such bodies governed by public law) who is responsible for procuring a public contract. ²
Economy	Minimising the cost of resources used or required (i.e. inputs).
Efficiency	The relationship between the output from goods or services and the resources to produce them.
Effectiveness	The relationship between the intended objectives and actual outcomes.
External (or Exogenous) Factors*	Factor independent of a public intervention which is partly or entirely the cause of changes (results and impacts) observed.
Impact*	Longer-term socio-economic consequences that can be observed after a certain period (usually medium or long term) after outputs are produced.
Input*	Financial, human, and material resources that are mobilised for the implementation of an intervention so as to produce outputs.
Intervention*	Any action or operation, carried out by public authorities or other organisations, regardless of its nature (policy, programme, measure or project). Means of intervention employed can include grants, loans, subsidised interest rates, guarantees, participation in equity and risk capital schemes or other forms of funding or financing.
Need*	Problem or difficulty/challenge affecting concerned groups, which the public intervention aims to solve (problem) or overcome (difficulty/challenge).
Objective*	Initial statement of the outcomes intended to be achieved by an intervention in order to meet a need.
Outcome*	Change or effect that arises over time from the outputs of an intervention and which normally relates to the objectives of this intervention. Outcomes include results (immediate effects) and impacts (long term). Outcomes may be expected or unexpected, positive or negative.
Output*	That which is produced or accomplished with the resources allocated to an intervention. These are the products and services that are actually produced and are directly measurable.

¹ Starred items (*) - with reference to the glossary of concepts and technical terms, Performance Audit Manual, European Court of Auditors, 2015.

² See Article 2, "Definitions" of Directive 2014/24/EU of the European Parliament and of the Council on public procurement.

Policy*	A set of different actions and operations (programmes, procedures, legislation, and rules) directed towards a single goal or general objective.
Processes (or Activities)*	Procedures and tasks employed to convert inputs into outputs (also 'Throughput').
Throughput	See 'Processes'.
Resource	A service or other asset used as an input to produce outputs (products and services) that meet a need. Human resources refers to people, while capital resources refer to money, tools and equipment.
Result*	The immediate effects or changes of outputs that arise for the persons or organisation affected by an intervention (either directly or indirectly) at the end of their participation in the intervention.

Executive Summary

The purpose of this report is to help public authorities who are responsible either for implementing and monitoring PPPs or for devising PPP policy to define and plan *ex-ante* those performance indicators that will demonstrate that the objectives of the PPP have been accomplished, together with the data required as supporting evidence.

At some stage during the life of a PPP contract it is likely that an independent body will seek to determine whether or not the project delivered as a PPP is performing as expected and that public resources have been used wisely. An EPEC review of international case studies has found that a lack of adequate evidence of sufficient quality means that when such *ex-post* assessments of PPP projects are made, these independent bodies are frequently unable to be conclusive as to the success of the PPP project – either the underlying investment project (an ‘intervention’) or as a process for realising the investment as a PPP. These bodies also often claim that PPP projects lack transparency in offering data and information that is of use to them in making their *ex-post* assessment. In many of the case studies reviewed it is therefore simply not clear whether PPP projects and PPP programmes³ have achieved their planned objective. Consequently, many review bodies find that the reported outputs and outcomes of PPP projects are no better (or worse) than those for projects not delivered as a PPP.

Unlike traditional, public-funded capital projects in which a Contracting Authority procures only design and construction services to create a defined asset, PPP projects (referred to hereafter as PPPs) involve long-term contracts incorporating life-cycle objectives. They pass through to a private partner several phases of implementation, including a substantial operations phase that, typically, lasts 25 to 30 years. This means that PPPs are exposed to different types of *ex-post* assessment at different times during their performance. It also means that *ex-post* reviews may be conducted more than once during the contract period and for a variety of reasons. Individual PPP projects and PPP programmes can be examined *ex-post* by different investigating entities, operating at different organisational levels and considering a range of operational and strategic issues.

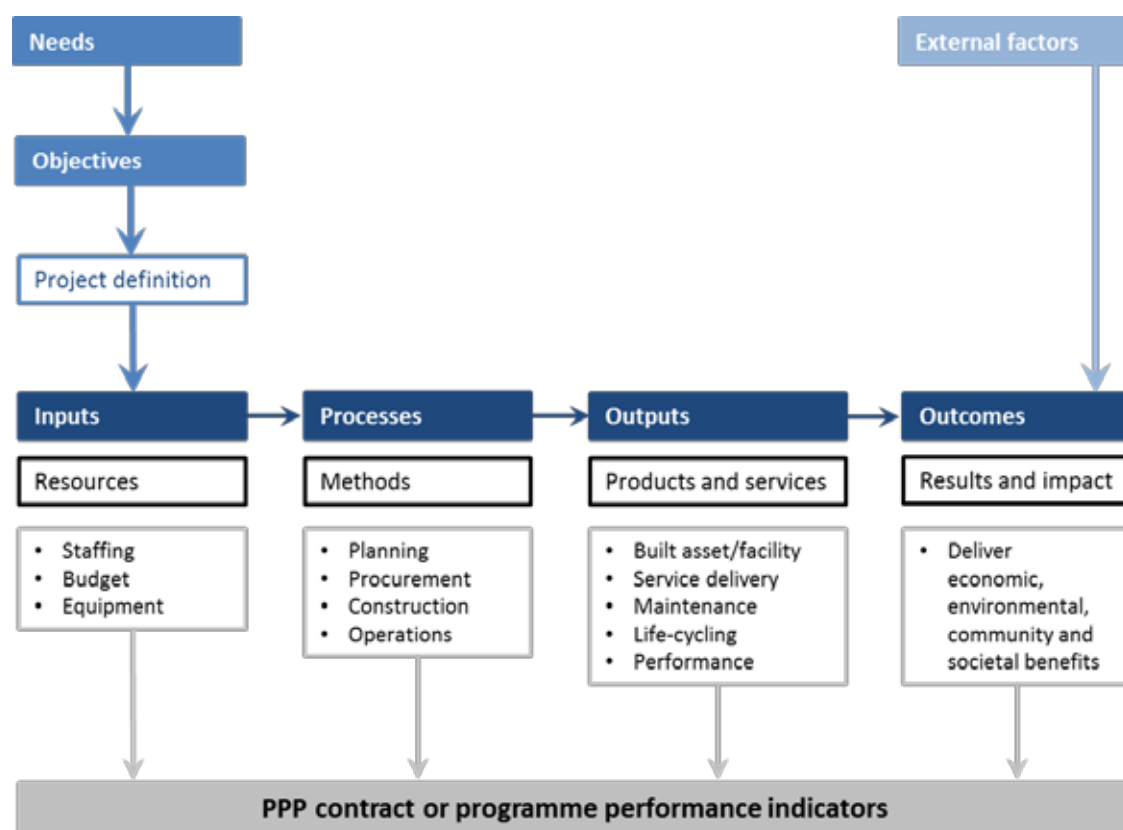
PPPs are often seen as innovative forms of investment, involving longer-term commitments of expenditure than in more traditionally procured public projects. They also bring potentially more visible, perceived long-term financial liabilities for public bodies and governments. The case studies examined show that, because of these particular characteristics, many *ex-post* assessments of PPPs are usually performed by a national audit body. These bodies often focus on assessing how well the processes that were used have delivered the services and their expected results. These assessments take the form of a **performance audit** and are generally conducted in accordance with well-established international guidelines. Separate from performance audit is **performance evaluation** – also often performed by national audit bodies –

³ A PPP programme means a group of PPP projects that are separate contracts but which are delivered in combination with each other, e.g. identifiable as being in a sector or linked to a common strategic objective.

which looks to verify whether the intervention had the expected effect and, furthermore, was the right thing to do.

When using performance audit to assess the effectiveness of a public intervention, such as a PPP or programme of PPPs, national audit bodies will commonly use a '**logic model**' (shown below) as an *ex-post* framework tool to determine what was expected to have been delivered by way of outcomes from the PPP or programme of PPPs. They will do this where no measurement framework was defined by the Contracting Authority before the start of the project or its procurement as a PPP. The same type of logic model is also often adopted by performance evaluators.

Outline logic model for a typical PPP project



The absence of defined *ex-ante* objectives in many of the case studies highlights the need for Contracting Authorities to spend time in the project preparation phase defining and recording the expected outputs and outcomes. These are best defined with clear, measureable performance indicators that can demonstrate, in the future, that the contract has performed successfully (or otherwise).

The logic model can assist in this process. Used *ex-ante*, it can define how the objectives of a PPP are expected to be achieved and measured. Further, the case studies show that meaningful *ex-post* assessment relies on high-quality evidence of both a quantitative and qualitative nature. Who should collect what information and when is also best planned *ex-ante* when performing the logic model analysis.

By adopting the same framework approach of the logic model that is commonly used by performance auditors and evaluators, and by setting out a strategy for collecting relevant evidence, Contracting Authorities and public authorities who are responsible for defining and developing PPPs will be better placed to define *ex-ante* the potential performance indicators that will demonstrate *ex-post* the effectiveness of a PPP project or programme and, hopefully, its success in meeting the planned objectives.

1. Introduction

1.1. Background

“The long term nature of a [PPP] contract should incentivise providers to maintain buildings to a high quality thus reducing costs in later life. However we have not been provided with clear evidence to suggest that PPP performs better in this area ... there is no convincing evidence to suggest that PPP projects are delivered more quickly and at a lower out-turn cost” ⁴

“On the basis of the evidence ... it is not possible to confirm that PPP has met the key policy objectives [and] cast serious doubt about whether PPP can deliver better quality, cheaper infrastructure on time and within budget as many of its proponents would have us believe.” ⁵

“... there is no evidence that including these services in a PPP contract is better or worse value for money than managing them separately...” ⁶

“There is still a lack of data available on the benefits of private finance procurement.” ⁷

When this report was first planned, it was intended to be an analysis of the published findings of selected case studies representing a range of *ex-post* assessments of PPPs (comprising a wide range of review types including audits, evaluations and academic studies) from both international and European sources and conducted in the last ten-to-fifteen years. The purpose was to review and collate the findings from these various sources to demonstrate - one way or the other - the effectiveness of PPP as a means of delivering public infrastructure and services. From this analysis, it was anticipated that it might be possible to bring together documented evidence of the performance of PPP projects.

The quotations in the box above are taken from some of the more than 60 reports that were reviewed as part of this study. They are typical of the many comments found in these reports that have raised doubts as to the so-called ‘3 e’s (the effectiveness, efficiency and economy) of PPP projects and programmes on the grounds that supporting evidence of successful outcomes is either missing or unconvincing.

⁴ UK House of Commons, Treasury Committee: Private Finance Initiative - Seventeenth Report of Session 2010–12; Volume I: Report. Para 46, page 25.

⁵ Reeves, Eoin: Public-Private Partnerships in Ireland: A Review of the Experience; Privatisation and PPP Research Group, Department of Economics, University of Limerick, Ireland; page 21:2013.

⁶ UK National Audit Office; The performance and management of hospital PFI contracts, 2010; page 8 ‘Conclusion on Value for Money’; Case study (d), Appendix B.

⁷ Taken from “Overview”; UK National Audit Office; PFI and PF2, January 2018; see <https://www.nao.org.uk/wp-content/uploads/2018/01/PFI-and-PF2.pdf>

It is noted that, despite the very large number of individual PPPs that have been carried out over more than twenty years, there are relatively few *ex-post* assessments of PPPs published or publicly available. Furthermore, because such *ex-post* assessments tend to consider outputs from a group or programme of PPP projects that have been in operation for a number of years, many of the reports to be found come from the older, more established PPP markets such as in the UK, Australia and Canada.

However, despite these limitations, a number of conclusions can be reached based on the review of these more than 60 reports. First, it was noted that those conducting such assessments complained frequently that there was inadequate evidence of sufficient quality available for them to be able to make reliable conclusions as to the success of the PPP – both as to the underlying investment project and the use of a PPP as a process for realising the project. Further, they often complained that data was withheld so as to ‘protect’ the commercial interests of the private partner and of the contract itself. This often leads to PPPs being described as ‘lacking transparency’. Consequently, while there may be a lot of factual data collected within a PPP contract, there appears to be relatively limited processing of that data so as to provide information that is ultimately considered useful, either to those responsible for monitoring PPP programmes or to PPP practitioners and policy-makers who are looking to make improvements to future PPP programmes.⁸

It is apparent, therefore, that the current approach adopted by many public authorities to data collection and reporting within PPPs is - by and large - deficient for the purposes of most types of *ex-post* assessment. It is for this reason that many *ex-post* assessments are ultimately inconclusive in their findings as to the success (or otherwise) of PPP projects and programmes in achieving their planned objectives and that the reported outputs and outcomes of PPP projects would appear to be no better than those for non-PPP projects. This may undermine the case for using PPPs when they may in fact be strongly delivering Value for Money (‘VfM’) outcomes.

This is a disappointing conclusion to reach given the high level of pre-planning effort generally associated with the preparation stages of a PPP, the complexity of the commercial structure adopted, their emphasis on payments being related to the monitoring of required outputs and the volume of routine reporting that is associated within most forms of PPP contract.

The final conclusion, therefore, to be reached from the analysis is that many public authorities are unfamiliar with the requirements of the process of conducting an *ex-post* assessment of PPPs. As a result, they are often inadequately prepared for when it takes place and lack evidence to demonstrate successful outcomes.

1.2. Purpose of this report

This report is aimed primarily at those public authorities who are responsible for implementing and monitoring PPPs (usually the Contracting Authority) or for devising PPP policy. It aims to help them to define and plan *ex-ante* for the collection of relevant

⁸ E.g. page 19 of Case study (e), Appendix B

and useful data from their PPP projects and programmes so as to better demonstrate the delivered outputs and outcomes of PPPs in *ex-post* assessments.

1.3. Structure of this report

The report has used as its starting point the findings of selected case studies drawn from a number of sources, including from public authorities, private organisations and academia that represent the evaluation of PPPs at the individual project level, at programme level (i.e. groups of projects) and, more generally, at the strategic policy level. A summary fiche for each of around 30 of the 60 or more case studies initially considered is provided in Appendix B together with a link to the original source material.

The report defines what is meant by the *ex-post* assessment of PPPs in the context of **performance audit** since this is the primary means of *ex-post* assessment described in the case studies examined. In describing the *ex-post* assessment process a distinction is made between performance audit and **performance measurement**, the latter being a part of the routine management of a PPP contract by the Contracting Authority (and which generates much of the data and evidence for subsequent use in the performance audit).⁹ It also differs from **performance evaluation**, which looks to verify whether or not the planned intervention had both the expected effect and was the right thing to do to achieve it.

The report describes how a '**logic model**' can be used as a framing technique to define *ex-ante* the expected outputs and outcomes of the PPP project or programme.¹⁰ The use of a logic model can help public authorities to develop a framework against which any future *ex-post* assessment of the PPP may take place and thereby secure predictable and better quality evaluation findings.

Acknowledging the often significant role played by national audit bodies in performing this type of *ex-post* assessment of PPPs, the report shows how these public institutions apply this type of framework in making an assessment of the **effectiveness, efficiency and economy** (the 3 e's)¹¹ of an intervention. It is noted that, since these three dimensions define VfM in an *ex-post* context, *ex-post* assessment is also about measuring whether or not VfM has been achieved.

The report finally shows how, by using a simplified, commonly-adopted logic model for a typical generic PPP project, **performance indicators** might be developed by the project authority responsible for the project and used to measure and so demonstrate the achievement (or otherwise) of the expected outputs and outcomes.

⁹ It also does not include the (annual) financial auditing of the books of account of the Private Sector Partner of a project nor of the auditing (by the national audit body) of the financial conduct of the public entity in its general accountability for public expenditure.

¹⁰ This report is limited in scope to looking at the project and programme levels as defined in Section 2.3 and does not consider assessment of performance at the policy or strategic level. This is addressed by a separate EPEC Members Working Group, "*Monitoring PPP Performance*" which further develops the use and application of the logic model.

¹¹ See Glossary, page 5.

2. A definition for ex-post assessments

This section introduces what is meant by *ex-post* assessment in the context of this report and in its application to PPPs. It identifies three different operational levels within the typical public administrative structures that are normally tasked with scoping and delivering PPP projects and programmes. It also considers the different assessments that are carried out at each of these levels, who normally undertakes them, how they are approached and when they are typically done.¹²

2.1. What is the ex-post assessment of PPPs?

The *ex-post* assessment of an action or series of actions is an analysis of past performance and of actual results. As outlined in section 1.2, the *ex-post* assessment of PPPs (or programmes of PPPs) can allow for the analysis of performance data to generate information on the effectiveness, efficiency and economy of the investment in achieving the goals and objectives of the project (or programme). The findings, based on a robust and validated data set, should allow policy-makers and those making investment decisions to consider with greater confidence the potential for further improving VfM and implementing new PPP projects and programmes.

Ex-post assessment (whenever it happens) can be viewed as the ‘check’ phase of the ‘plan – do – check – act’ cycle of good management practice in the continuous improvement of business processes. It is therefore an essential component of the PPP project cycle.

Different types of checking exercises are conducted by public authorities during the *ex-ante* and *ex-post* phases of any project, including formal audits and evaluations. This is particularly so for PPPs as they occur over much longer time periods than conventional public contracts for the same type of capital investment. The progression - from identification of the need for an intervention through to a contract award, followed by the delivery of the services through to the end of the contract term - can typically cover a 25 - 30 year period (see Figure 1).

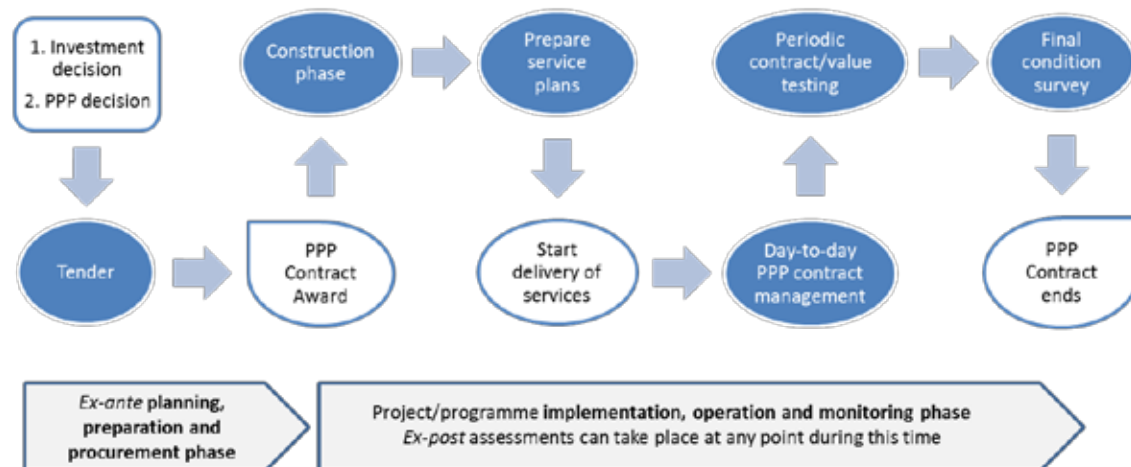
This report considers those assessments that occur after the award of the PPP contract to the Private Sector Partner (‘PSP’), i.e. during the construction and operation phases only. Of course, *ex-post* assessments are made of the many *ex-ante* activities that lead up to and including the award of the PPP contract. These may include an assessment of the Contracting Authority and related public authorities in the performance of these activities, the quality and nature of decisions and of the decision-making processes.¹³

¹² In this context, ‘assessment’ is taken to include any structured, recorded process which comprises the monitoring, measurement and/or checking of the performance of a PPP project or programme through the use of audit, evaluation or similar methodological approach.

¹³ In some Member States, national audit bodies will perform a formal review of parts of the project preparation phase, for example to check the proposed risk transfer arrangements in the PPP or the VfM test as part of the approval and quality assurance process prior to contract award and financial close. This type of assessment is not covered by this report.

This type of assessment, while conducted after the contract is awarded, is not addressed by this report.

Figure 1 – The progression of a PPP Project



2.2. The timing of ex-post assessment in a PPP project

A **project** may be defined as “a series of works, activities or services intended to accomplish an indivisible task of a precise economic and technical nature that has clearly identified goals”.¹⁴

A project therefore typically includes the following main components:

- the scope of works or activities to be performed;
- the product or services provided (the outputs);
- the timing of the works and services;
- costs; and
- the technology involved.

One or more projects may be required to deliver an objective.

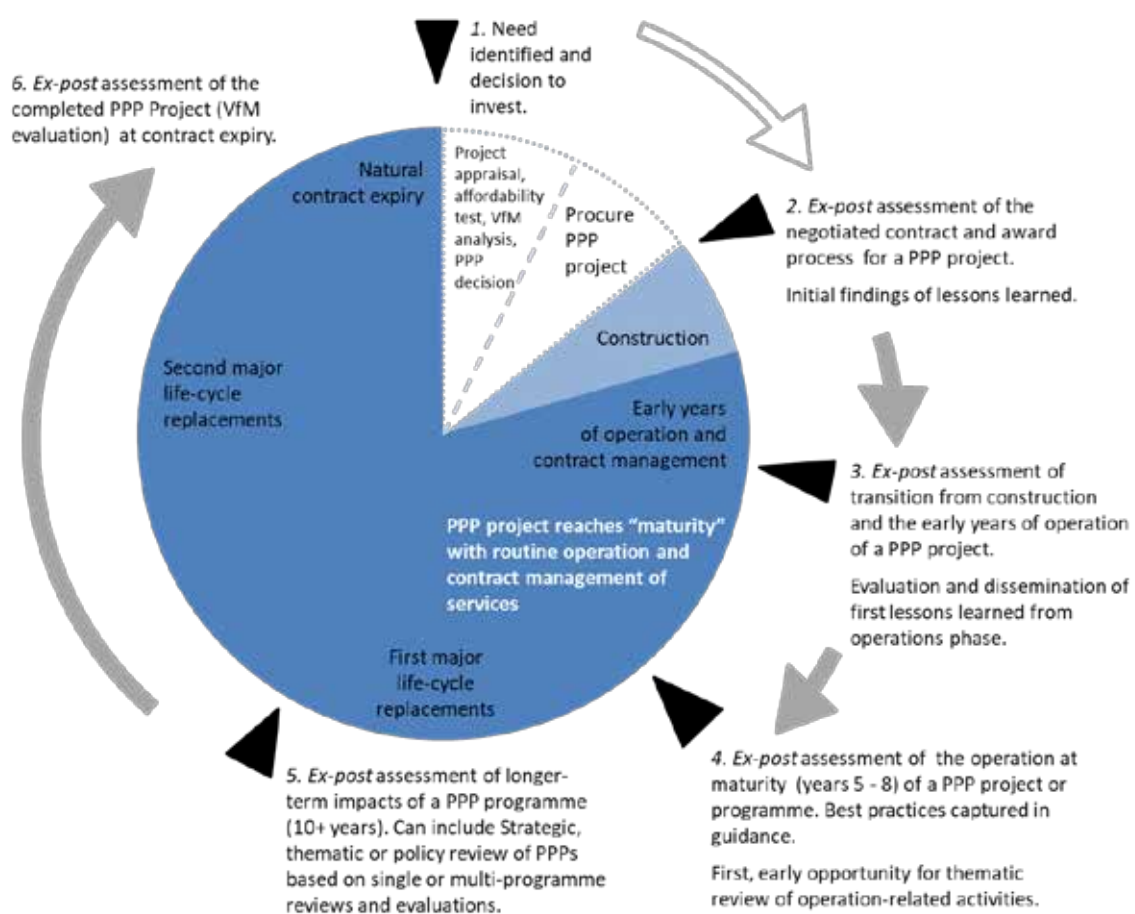
The nature and purpose of *ex-post* assessments performed within PPP projects changes over time to reflect the components undertaken, the maturity of operation and the type of information available for the assessment (see Figure 2).

From the case studies, *ex-post* assessments have been found to occur at each of:

¹⁴ After definition of “Major Project” in Article 100 (Major projects) of Regulation (EU) No 1303/2013,

- a time soon after contract award and financial close;
- a time soon after completion of construction of the asset and the start of delivery of services (more usually 3-5 years after the first years of operation);
- a point in time when operations have reached a maturity (at least 5 years);
- at points in time midway into the contract term;
- after a significant change to the contract (including early termination); and
- after the expiry of the term of the contract.

Figure 2 – Opportunities for ex-post assessment in a PPP project



The long-term nature of PPP projects means that while each review point is, in itself, an *ex-post* assessment, its content and evaluation objective differ from the preceding review point. Thus, an *ex-post* assessment conducted soon after completion of construction will invariably focus on construction-related activities, such as whether the project was delivered on time and within budget and meets the quality objectives of the public authority and/or Contracting Authority responsible for its implementation (as set out in the PPP contract requirements and/or the original business case/investment plan).

However, an *ex-post* assessment carried out, say, a third-way through the operation phase will largely disregard consideration of the construction phase. Rather, it will focus on whether the contract is delivering the services to the standard and quality planned, whether planned maintenance activities have taken place and if any subsequent changes made by the public authority to its requirements have affected the cost of the planned outputs. Thus, *ex-post* assessment is a **continuous process** with an evolving focus.¹⁵

2.3. Ex-post assessment of PPPs at the project, programme and strategic policy levels

PPPs are a type of public intervention.¹⁶ A public intervention can be analysed as “a set of financial, organisational and human resources mobilised to achieve, in a given period of time, an objective or set of objectives, with the aim of solving or overcoming a problem”.¹⁷ Interventions, by way of investment in assets and services, can take the form of a strategic policy, a programme or a project.

Ex-post assessment of interventions usually takes place at each of three principal administrative levels within the general public management structure (see Figure 3), namely:

- Level 1** - at the individual project level, e.g. a school PPP contract;
- Level 2** - at a programme level (i.e. a number of related projects), e.g. a programme of PPP contracts for schools; and
- Level 3** - at the policy or institutional level, e.g. a decision by the Ministry of Education to use PPPs to deliver schools to provide a better learning environment and so improve education outcomes.

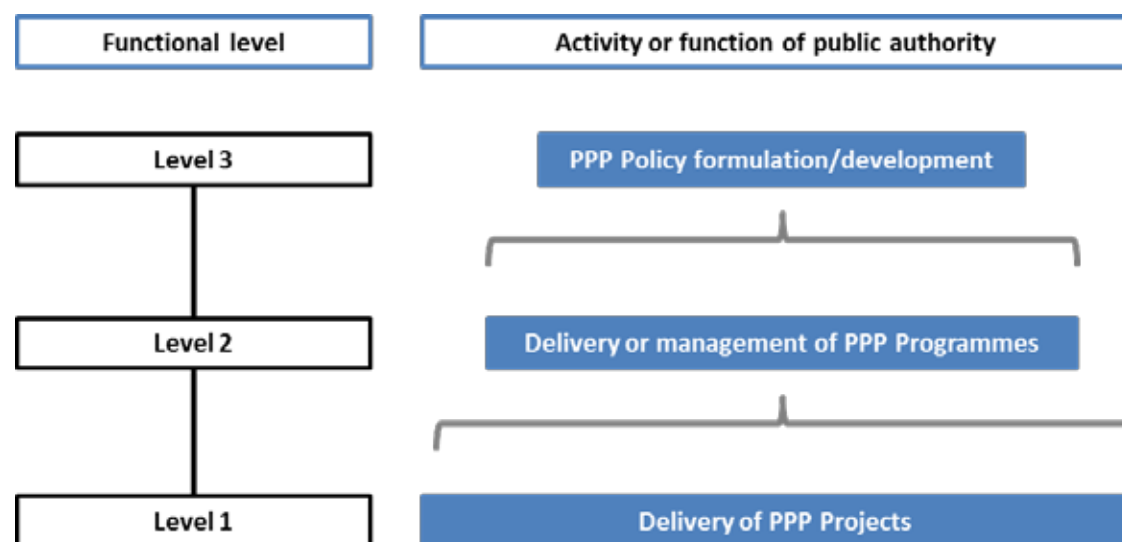
The approach to performing *ex-post* assessment at each of these administrative levels differs strategically (that is, in its purpose) and in how and when it is performed. The resources and skill sets required of the assessment teams also differ.

¹⁵ In this regard, VfM assessment can also be considered as a process measured over the life of the project. See EPEC report “Value for Money Assessment: Review of approaches and key concepts”, March 2015.

¹⁶ ‘Intervention’; see Glossary, page 5.

¹⁷ European Court of Auditors, Performance Audit Manual, March 2013.

Figure 3 – Levels in the public administration where *ex-post* assessment of PPPs can take place



1) Level 1: the PPP project

The individual PPP project is the level at which an *ex-post* assessment is most relevant to a Contracting Authority. Assessments at this level can occur at frequent intervals with the opportunity for assessment reports to be presented in a standard format where there are multiple, similar PPP projects. The reporting standards within a project's contract are established in the *ex-ante* stages of the project (i.e. preparation) as part of the envisaged contract management strategy.¹⁸

Interventions assessed at Level 1 are most likely to be able to offer a counterfactual (i.e. a non-PPP) project against which the PPP aspects of the project can be compared. A comparison might also be made of a project's performance as part of an *ex-post* assessment of PPP projects operating in the same or similar contexts.

Of the examples at this level that have been reviewed (see Appendix B), the *ex-post* assessments tend to be one-off in nature and focused on very specific issues that have occurred within the particular PPP contract (such as specific problems or difficulties that were encountered during the implementation of the project).

¹⁸ See EPEC report "Managing PPPs during their contract life", March 2014.

Examples of Level 1-type ex-post assessment reports include:

- “The Termination of the PFI Contract for the National Physical Laboratory”, 2006, by the National Audit Office, UK;¹⁹ and
- “Belfast Metropolitan College's Titanic Quarter PPP Project”, 2014, by the Northern Ireland Audit Office, UK²⁰

2) Level 2: the ‘PPP Programme’

A ‘PPP programme’ means a group of PPP projects either of the same or similar character which is developed in combination as part of a larger investment plan and to which a ‘programme management layer’ may be added.²¹ A review of the case studies suggests that, in most cases, the *ex-post* assessment of PPPs that are performed by national audit bodies occurs at this level. Reviews of this type are also commonly directed at uncovering particular lessons learned from the PPP programme, analysing management practices as well as more qualitative assessments of performance in achieving the objectives sought.

The opportunity to compare the relative performance of individual PPP projects or contracts may arise, depending on the size and homogeneity of the programme. Further, it might be possible to make an assessment of the 3 e's of the programme management approach, e.g. through increased contract size or benefits derived from standardisation and replication. However, at this level it is often more difficult to offer a counterfactual against which the PPP aspects of the programme can be compared due to the limited number of non-PPP programmes of comparable scale and character.

¹⁹ Case study (a), Appendix B.

²⁰ Case study (b), Appendix B.

²¹ See EPEC report “A Programme Approach to PPPs: Lessons from the European experience”, July 2015.

Examples of Level 2-type ex-post assessment reports include:

- “Contract Management in DBFMO Projects”, 2010, by Algemene Rekenkamer (Court of Audit), Netherlands;²²
- “Étude sur la performance des contrats de partenariat”, 2011, MAPPP, France;²³
- “Review of Operational PFI/PPP/NPD Projects”, 2011, by the Scottish Futures Trust, UK;²⁴
- “Les partenariats public privé du plan hôpital 2007: une procédure mal maîtrisée”, 2014, by the Cour des Comptes, France;²⁵
- “The performance and management of hospital PFI contracts”, 2010, by the National Audit Office, UK;²⁶ and
- “The Grouped Schools Pilot Partnership Project”, 2004, by the Comptroller & Auditor General, Ireland.²⁷

3) Level 3: PPP policy level

Many types of review take place at this level, often for different purposes. This can include looking to find broader insights as to the effectiveness of, and efficiencies achieved from, using PPPs, such as:

- an understanding of the purpose of the PPP procurement model and environment in which it operates;
- the goals and objectives of the investments made (e.g. the PPP policy objective,²⁸ the capital assets created and/or the service outcomes sought);
- the core business processes to achieve the outcomes sought; and
- the benefits realised and the impact of the intervention.

This type of *ex-post* assessment can also include what might be described as ‘thematic’ reviews. Rather than focus on a particular investment programme, this considers a particular feature of PPP delivery that is seen, for example, as generally being problematic or overly-influential in achieving outcomes.

²² Case study (e), Appendix B.

²³ Case study (f), Appendix B.

²⁴ Case study (h), Appendix B.

²⁵ Case study (j), Appendix B.

²⁶ Case study (d), Appendix B.

²⁷ Case study (k), Appendix B.

²⁸ In this report ‘PPP policy’ is taken to mean the national laws, regulations and decision-making frameworks that define the legal and institutional governance arrangements within which PPP programmes and projects will be implemented. Within this framework, a distinction can be made between the general policies aiming to set or strengthen the PPP environment and sectorial policies whose implementation may rely on the use of PPPs.

Examples of Level 3 policy-type ex-post assessment reports include:

- “Review of Partnerships Victoria provided Infrastructure”, 2004, by the Treasurer of the Australian Government;²⁹
- “A new approach to public private partnerships”, 2012, by HM Treasury, UK;³⁰ and
- “Les contrats de partenariat : des bombes à retardement”, 2014, by the Sénat, France.³¹

And thematic-type ex-post assessments include:

- “Review of Lessons from completed PPP Projects financed by the EIB”, 2009, by the EIB, Luxembourg;³²
- “Breaking New Ground: P3 Hospitals in Canada”, 2011, The Canadian Council for Public-Private Partnerships (CCPPP);³³ and
- “The choice of finance for capital investment”, 2015, by the National Audit Office, UK.³⁴

More strategic types of *ex-post* review can often seek to make a comparison of the PPP approach with a counter-factual, i.e. non-PPP scenario. However, at this level it is often very difficult to offer a counterfactual as it requires consideration of a position that might have persisted if no PPP had been used (and which could have meant no investment at all). This is made more difficult to demonstrate if few or no indicators of success were defined *ex-ante* to the policy implementation stage. Nonetheless, this type of *ex-post* assessment of the strategic impact of PPP policy and programme implementation can have a significant impact on decision making and policy-formulation.

²⁹ Case study (m), Appendix B.

³⁰ Case study (n), Appendix B.

³¹ Case study (o), Appendix B.

³² Case study (r), Appendix B.

³³ Case study (v), Appendix B.

³⁴ Case study (t), Appendix B.

3. The role of performance audit in ex-post assessment

3.1. Performance auditing: the principal method of ex-post assessment

The case studies examined show that *ex-post* assessment of a PPP programme is often performed by a national audit body or a public body at national government or parliamentary level. The reports produced vary considerably in scope and nature, depending on the specific objective of the assessment, national guidance on the conduct of such assessment (and of audits in particular) and, of course, the findings themselves. Those assessments conducted by national audit bodies are usually carried out in accordance with the commonly agreed international standards.³⁵

Public authorities have the primary duty to collect and analyse performance data within individual PPP projects. In formulating the data set and collection methods to be used and in order to demonstrate satisfactory performance, it is important for public authorities to understand how national audit bodies and similar public bodies will approach their task of *ex-post* assessment. This section defines what is meant by **performance audit** in the context of *ex-post* assessment of PPPs. It describes the logic model that is characteristic of the approach taken by many national audit bodies within Europe (following international best practices) and the principal methodological tools used to identify and collect audit evidence. Performance audit generally takes place at Levels 1 and 2 only.

3.2. How performance audit differs from performance measurement

Regular, periodic monitoring of how a PPP is performing is an integral part of the function of a PPP's private and public partners. The validation, for example, of deductions and other performance parameters forms a large part of the PPP contract management duties carried out by the Contracting Authority. This activity is best described as **performance measurement** of the contract (see Box 1). It is essential that this activity is carried out in strict compliance with the contract's performance management system if the expected VfM is to be protected and delivered. This is all part of the internal mechanisms of the day-to-day contract management activities.³⁶

³⁵ www.issai.org/media/69911/issai-300-english.pdf

³⁶ *"The House of Representatives needs reliable information to assess the implementation of DBFMO projects. We therefore again stress the importance of evaluations. Each project must be evaluated, with particular attention being paid to the development of costs, the quality of outputs and the relationship between cost and quality and changes in added value. Evaluations should also increase the effectiveness of the improvements made and promised in the field of contract management. Good contract management, after all, can provide greater assurance on the added value of DBFMO projects."*
Netherlands Court of Audit; Case study (e), Appendix B, p. 24 (2010)

Box 1 – Principles of Performance Auditing

The “Performance Audit Manual” (2015) published by the European Court of Auditors (‘ECA’) provides guidance by national audit bodies in Europe on the planning, conduct and reporting of performance audits.^{37,38} It sets out a standard approach to the development and setting of an audit objective, the planned ‘audit criteria’ and the audit approach that will be used to assess the success (or otherwise) of the achieved outcomes of the audit’s subject matter.

An ‘audit objective’ is determined by the auditor which relates to the principles of the 3 e’s. It is generally framed as an overall ‘audit question’ that is then broken down into thematically related and complementary sub-questions.

The audit approach that is adopted can follow one of three general approaches:

- i) **a results-oriented approach:** examination of whether the objectives (perhaps as described by predefined outcomes) have been achieved as intended (e.g. “Report on the performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects”, 2008, National PPP Forum , Australia);³⁹
- ii) **a systems-oriented approach:** examination of the proper functioning of management systems and processes (e.g. “A Framework for evaluating the implementation of Private Finance Initiative projects”, 2006, National Audit Office, UK);⁴⁰ or
- iii) **a problem-oriented approach:** verification and analyses of causes of particular problems (e.g. “Review of Operational PFI/PPP/NPD Projects”, 2011, Scottish Futures Trust).⁴¹

The approach adopted will determine the nature of the examination to be made and whether qualitative and/or quantitative criteria are used in the making the assessment.

³⁷ www.eca.europa.eu/Lists/ECADocuments/PERF_AUDIT_MANUAL/PERF_AUDIT_MANUAL_EN.PDF

³⁸ Many national audit bodies have developed their own guidance in accordance with Standard ISSAI 300 (“Fundamental Principles of Performance Auditing”) and within national mandates, laws and regulations. Specific guidance on performance auditing in the form of audit manuals has been also produced by a number of European organisations including the European Court of Auditors the National Audit Office (UK) and Algemene Rekenkamer (Court of Audit, Netherlands).

³⁹ Case study (p), Appendix B.

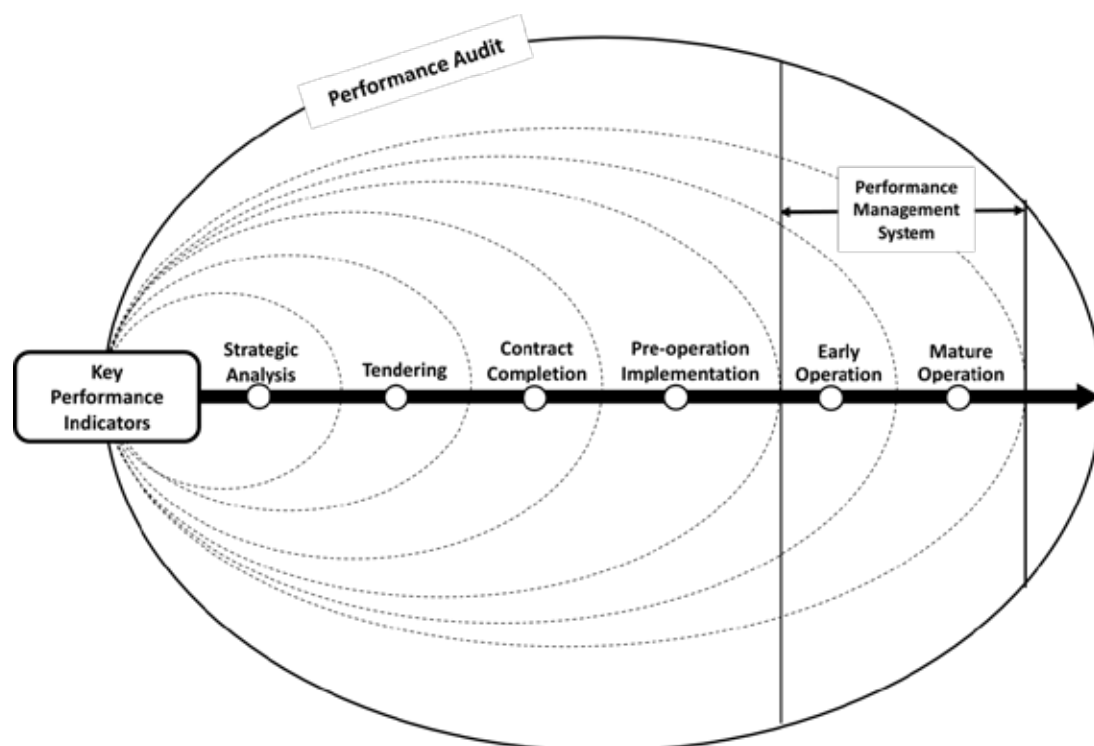
⁴⁰ Case study (z), Appendix B.

⁴¹ Case study (h), Appendix B.

However, when a national audit body performs an *ex-post* assessment of a PPP, it generally takes the form of a performance audit. The audit body does not carry out this activity in the context of managing the PPP contract itself. The assessment is instead a broader, more holistic process of appraisal of performance and, in particular, how the actual outcomes compare with the intended objectives (see Figure 4).

Thus, a performance audit is usually carried out by an independent, third party that is functionally separate from the entity responsible for implementing the PPP. The role of the PPP as the means of delivery of the underlying investment project and of these objectives should only be a part of this assessment. This is why it is important to distinguish between the underlying project and its means of delivery as a PPP: both of these distinct components may be of interest to the audit body whose concern will be the achievement of overall outcomes and how these compare with the objectives.

Figure 4 – Relationship of performance measurement to performance audit in a PPP ⁴²



⁴² SAEED, A and DUFFIELD C, "Improving *ex-post* performance measurement of Public Private Partnership projects that incorporate project outputs and benefits", University of Melbourne, Australia, 2015, Proceedings of the Australian Institute of Project Management 2015 National Conference, Hobart, Tasmania (reproduced with kind permission).

Table 1, below, summarises the main ways in which performance audit differs from performance measurement.

Table 1 – Comparison of typical features of performance measurement and performance audit

Description	Performance measurement	Performance audit
Purpose or objective	Key purpose: assess PPP project accomplishments through performance-based payments to PSP. Assess project performance by each contract party in compliance with the PPP contract terms. Assess progress made or being made towards pre-established goals and objectives.	Key purpose: assess the economic, efficient and effective use of public funds. Assess accountability of those who operate a PPP programme and/or evaluation of current operations. Provide recommendations to improve the economy, efficiency and effectiveness of PPPs.
Performed by	Programme commissioning or implementing body, contract management team.	National audit body, Government-level administrative body.
Timing	Regular and continuous (monthly, annually).	Determined by audit body. Often at particular milestones but not more than every 5 years.
Report audience	Public authority, contract parties, PPP programmes monitoring body.	Government, public, public authority.
Subject matter	Contract compliance and performance, contract management activities.	Policy, programme, organisation, activities and management systems.
Legal basis	PPP contract, national guidelines.	National law.
Method of approach	Pre-determined, standard contract procedures.	Internationally recognised methodology (more flexible, varies from audit to audit).
Issues considered	Current and past performance of the contract terms by the PPP contract parties (public and private), correction of failures and evaluation of financial penalties or other contract remedies.	Current performance of the contracts in achieving their objectives and of the contract administrators (i.e. the public authority) and future improvements to PPP policy, programme, organisation, activities and management systems.
Audit/ assessment criteria	Criteria, performance thresholds and indicators set by the PPP contract.	Unique criteria for the individual audit. More open to the auditor's judgement.
Reporting	Monthly and annual reports. Generally standardised. Not usually made publically available.	Special report on an <i>ad hoc</i> basis. Varying structure and content depending on audit objectives. Publically available.

3.3. The use of a logic model in the ex-post assessment of PPP

The **logic model** allows the *ex-post* assessor to make a comparison of the actual economy, efficiency and effectiveness (i.e., the 3 e's) of an intervention, such as a PPP project or programme, with the planned outputs and outcomes. It can also consider the efficiency of a PPP's operational management in achieving the intended objectives.

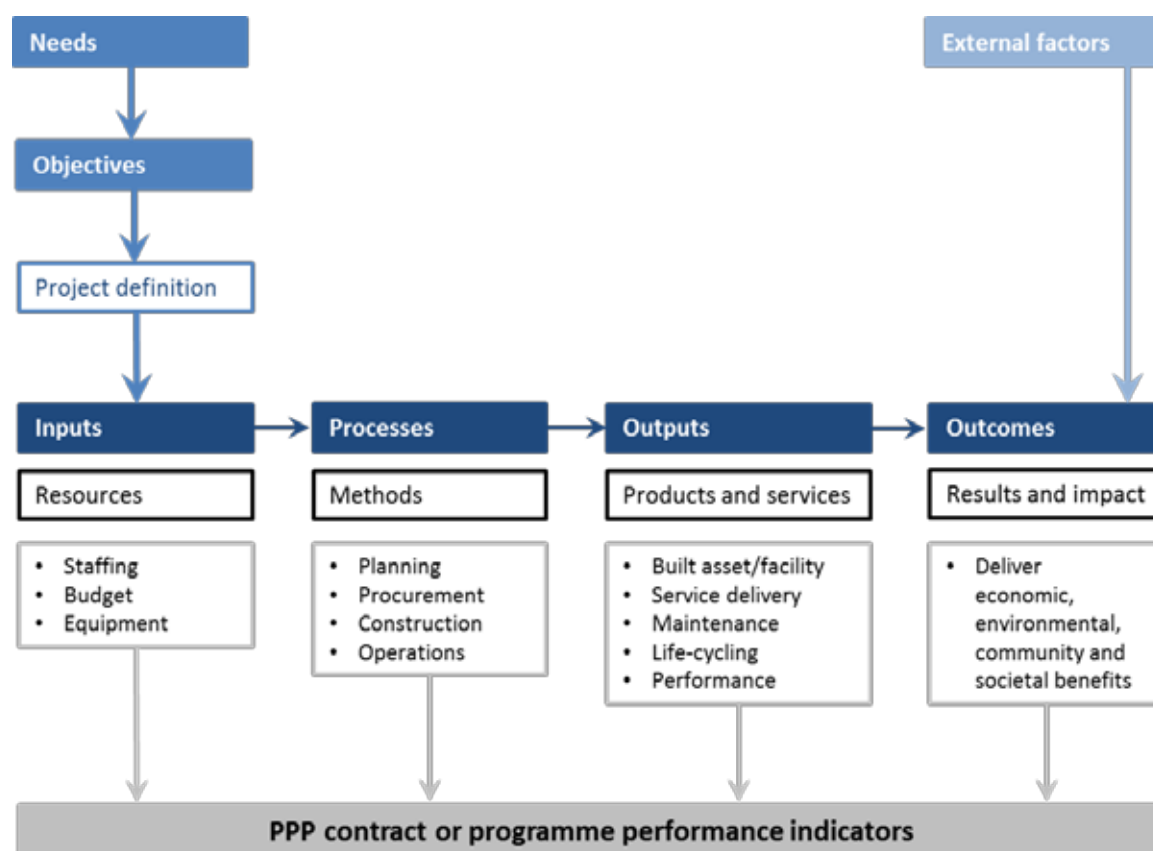
If, however, for a given intervention a predefined set of objectives does not exist, then the performance auditor will first establish a frame of reference in which to define its own perception of the intended objectives of the project. This will be done in accordance with established guidance, like that issued by the ECA and described in the previous section. The objectives of a project determined in this way may (or may not) align with the original intentions of the public authority responsible for implementing the project but, nevertheless, will form the basis of the subsequent *ex-post* assessment.

The logic model, outlined in Figure 5, defines the relationship between the **needs** to be addressed by the public intervention and its **objectives**. While the model is considered to have general application to Levels 1, 2 and 3, the following application considers the project and programme levels only (i.e. Levels 1 and 2). In order to understand the logic model it is first useful to have a precise understanding of the different terms. Each of the principal terms used in this model are defined as set out below in Box 2 (see also the Glossary).⁴³

Box 2 – Terms used in the logic model

Need	a problem or difficulty/challenge that affects concerned groups and which the public intervention aims to solve or overcome.
Objective	an initial statement of the outcomes intended to be achieved by an intervention in order to meet a need .
Input	the resources that are deployed for the implementation of an intervention, which may be financial, human, and material.
Processes	the procedures and activities used to convert inputs into outputs .
Output	what is produced or accomplished with the resources allocated to an intervention; an output is directly measurable and either singly or collectively with other outputs delivers an objective .
Outcome	the change that arises from the implementation of an intervention and which normally relates to the objectives of the intervention. Outcomes include results and impacts.

⁴³ With further reference to the glossary of concepts and technical terms, Performance Audit Manual, European Court of Auditors, 2015.

Figure 5 – Outline logic model for a typical PPP project ⁴⁴

There would appear, therefore, to be an advantage for public authorities to prepare an *ex-ante* logic model and ensure that the PPP project's intended outputs and outcomes are clearly documented from the outset, i.e. not left to be determined by others later. Further, if performance measures are also defined *ex-ante* (together with the supporting data that needs to be collected) then the definition of success for the intervention can also be claimed to have been established and the indicators of that success to have been defined.

3.4. Measuring ex-post outputs and outcomes

Ultimately, the *ex-post* assessment will consider the success of the intervention in meeting its objectives which will be reflected in the actual outputs and outcomes measured against those which were intended.

⁴⁴ Developed by EPEC after Performance Audit (Manual), Algemene Rekenkamer, Netherlands, 2006 – page 12, Figure 1.1; and Performance Audit Manual, ECA, 2015 – “The Programme Logic Model”, page 17. Definitions as per glossary of concepts and technical terms, Performance Audit Manual, ECA, 2015.

While outputs can be directly measured, outcomes (and impacts)⁴⁵ are more difficult to assess. Linked to the project's objectives, outcomes are typically measured by approximation and over a period of time. They are often documented following a project or stage completion. An example of *ex-ante* expectations for outputs and outcomes to meet the objectives of a Dutch road programme (with annotations added) is shown in Figure 6.

However, if the objectives set out at the start of planning of an intervention are expressed in overly broad terms, it will be difficult to define outcomes with sufficient precision for them to be easily measured. Further, where the overarching goal or objective of an intervention is in fact more strategic in nature (or linked to a wider investment programme) then the measurement required to show success for a PPP project will need to be set at a higher organisational level than the project level (see Section 2.3).

These difficulties are not unique to PPPs. Indeed, most audit bodies acknowledge that assessing the outcomes or impact of any intervention can be difficult.

However, since outputs can be measured directly - often by using a performance indicator (sometimes called a 'Key Performance Indicator' or 'KPI') carefully defined in a well-prepared PPP contract - it follows that the performance of PPPs is perhaps more easily measurable than under more traditional procurement arrangements. Consequently, from measuring these outputs, indicators can be more easily devised to measure their effects as both the results (i.e. immediate outcomes) and, over time, impacts from being under a PPP arrangement. Nevertheless, these particular indicators may not always be relevant or sufficient for the public authority in demonstrating its *own* success in achieving the *wider* planned benefits (i.e. outcomes) and in meeting the objectives of the intervention itself.

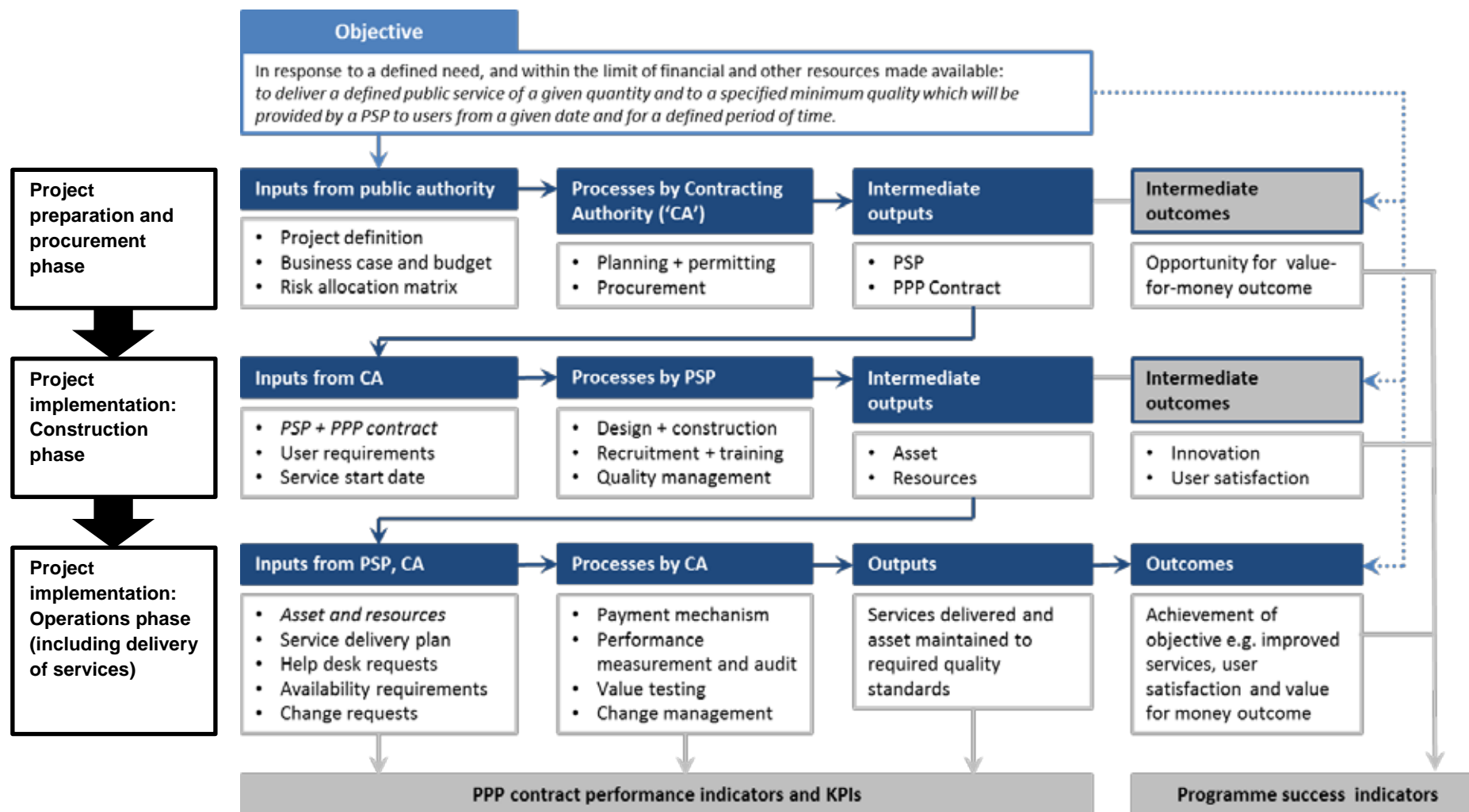
Preparing an *ex-ante* logic model that shows pre-defined objectives, outputs and outcomes clearly and logically linked to the planned inputs (resources) and processes needed to achieve them helps to identify the evidence needed independently to establish the economy, effectiveness and efficiency with which they have been achieved. These preparations may need to happen at each of the project, programme and or policy levels fully to demonstrate achievement of the intended outcomes. An outline example of how activities within a typical PPP might be defined at the project level within a logic model is given in Figure 7.

⁴⁵ 'Impacts' are defined as the longer-term socio-economic consequences that can be observed after a certain period after the completion of an intervention; taken from the glossary of concepts and technical terms, Performance Audit Manual, ECA, 2015.

Figure 6 – Example of typical project objectives, outcomes and outputs:
‘Factsheet’⁴⁶



⁴⁶ Source: Rijkswaterstaat, Ministry of Infrastructure and the Environment, Netherlands, 2014, see [www.staticresources.rijkswaterstaat.nl/binaries/Factsheet%20Roadway%20expansion%20Schiphol%20-%20Amsterdam%20-%20Almere%20\(SAA\)_tcm21-36763.pdf](http://www.staticresources.rijkswaterstaat.nl/binaries/Factsheet%20Roadway%20expansion%20Schiphol%20-%20Amsterdam%20-%20Almere%20(SAA)_tcm21-36763.pdf)

Figure 7 – Suggested *ex-ante* logic model for a typical PPP Project

4. Defining ex-post performance indicators

4.1. Performance indicators

This section considers performance indicators and how these might be defined and measured in the context of the *ex-post* assessment of PPPs at the project and programme levels, i.e. Levels 1 and 2 (see Section 2.3).

A performance indicator refers to the means by which the objective of a piece of work or activity can be judged to have been achieved or not achieved. The indicator should be tied to the objective, outcome or output and serve to measure the degree of success in its achievement. Performance indicators are primarily seen as quantitative tools and are usually expressed as a numeric value (e.g. a rate, score, ratio, percentage or index). It might also, by definition, be a binary test (e.g. yes/no; pass/fail).

Such indicators are typical of the data sets used in quantitative analysis involving the examination of numerical data. Analysis of the quantitative data allows evidence-based conclusions to be made and provides a clear measure of costs, benefits and performance and their relative significance. Tracked over time, such data also allow trends in performance to be identified. Quantitative data are often regarded by auditors as being of higher quality as they are more easily verified and audited. They may also be used to corroborate the relative significance of qualitative - and perhaps more subjective - observations.

Figure 7 in the previous section provided a suggested *ex-ante* logic model for a typical PPP project. For the operational phase of the typical PPP contract it indicates the opportunity for both Level 1 project and Level 2 programme performance indicators to be linked to each of the stages of input, process and outputs. For this report, the term KPI is used to refer to those indicators that define and measure inputs, resources and outputs at the PPP contract level (i.e. Level 1). For the measurement of achieved **outcomes** (which will likely extend beyond PPP contract-level KPIs) it these are categorised here as '**intervention success indicators**', measured at either Level 1 or Level 2 respectively.

Possible KPIs and intervention success indicators are outlined in the Table in Appendix A for each stage in the Level 1 project development cycle and for each of the various inputs, processes, outputs and outcomes that make up the suggested *ex-ante* logic model. While a Contracting Authority is likely to be best placed to define PPP contract KPIs, it is probable that the development of intervention success indicators will be set at the higher, policy-setting level of the public body. Further, as discussed in the previous section, these indicators may vary over time to reflect the achievement of milestones, maturity of service provision and completion of activities.

Box 3 provides an example of how PPP contract KPIs are used by the Scottish Futures Trust to demonstrate achievement of programme objectives.

Box 3 – Use of KPIs by Scottish Futures Trust’: *hub*

The Scottish Future Trust (SFT) has awarded five Territory Partnering Agreements (TPA). Each TPA establish a framework agreement that enables the award of individual contracts for the long-term provision of assets and services. Each contract is awarded to a *hubco*. Using a collaborative, ‘partnering’ approach, the *hubco* is responsible for providing services to certain public authorities within the territory and delivering projects identified in a delivery plan. Each *hubco* has an exclusive right for the first 10 years of the partnership to develop proposals for certain projects under certain conditions. Some projects are delivered as a form of PPP using the SFT’s Non Profit Distributing (NPD) programme model through a special purpose vehicle (*sub hubco*) established for each project.

The TPA is the contractual document that governs the relationship of a *hubco* with the Contracting Authority. It sets out the obligations of each party to the other including the obligation of *hubco* to provide ‘Partnering Services’. In keeping with the partnering approach, the Partnering Services are to be provided “*in a collaborative fashion to achieve the hub Objectives and the objectives set out in the [delivery plan] and in particular, the provision and demonstration of continuous improvement in overall value for money of new projects and the services*”. This includes the requirement to develop a management system for “*accurately measuring and reporting performance*” (Part 3 Section 1.1.1 of the SFT’s template TPA).

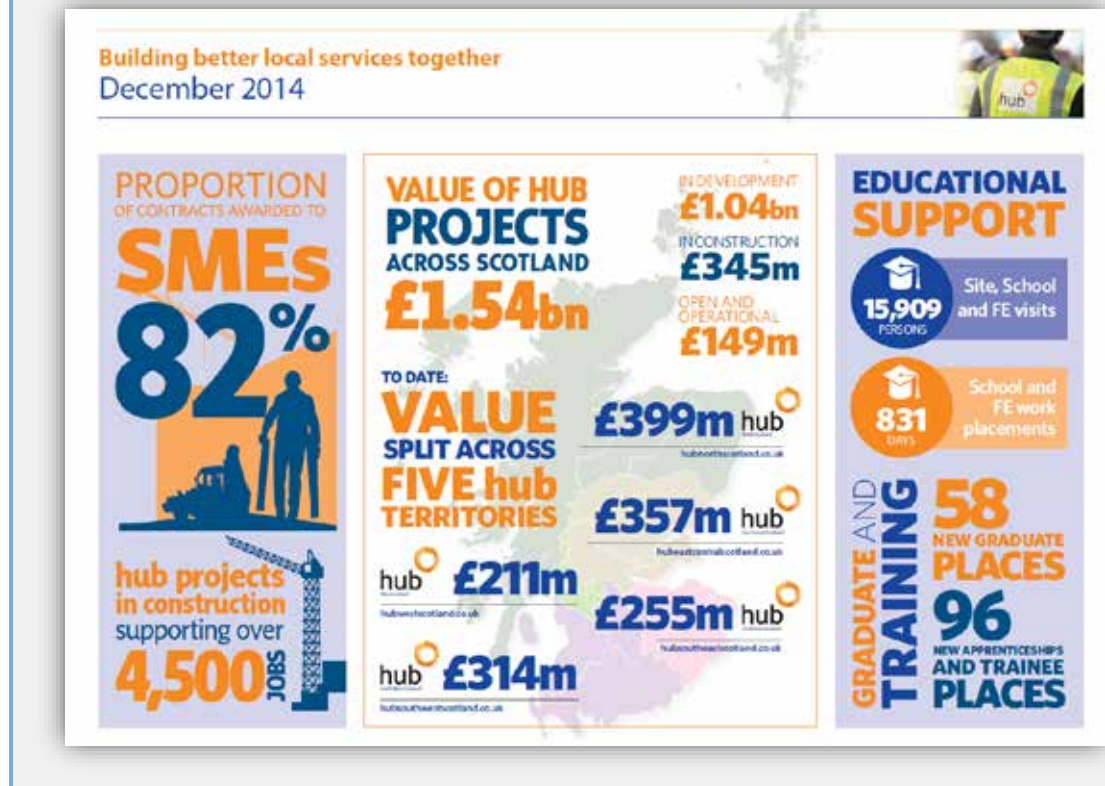
The TPA further sets out obligations on *hubco* in respect of performance measurement which requires it to “*regularly monitor and report the standard of performance*” of the services and demonstrate continuous improvement. This is to be achieved “*by the use of appropriate key performance indicators*”.

Set out below are the headings under which some 50+ separate KPIs are presently monitored and reported on by the South East *hubco*. Each KPI identified under these headings has a target set as a minimum level of performance standard:

- Health and Safety;
- Quality (Systems Compliance, Design and Construction);
- Programme (Project Development and Construction);
- Cost and Value for Money;
- Partnering;
- Community Engagement;
- Community Benefits; and
- Sustainability.

Each KPI is uniquely described, with a specific measure and measurement methodology in place. Failure to achieve the required measure by either a set margin (creating a ‘significant failure’) or repeated poor performance (defined at a level and specified frequency - a ‘Track Record Test’) can lead to an event of default by the *hubco* under the TPA.

Example of high-level, strategic reporting by SFT of *hub* KPIs from across all territories:



4.2. Using qualitative indicators

While quantitative analysis uses verifiable, ‘hard’ data, qualitative techniques rely on the interpretation of potentially less measurable, less objective information. As a result they are open to having emphases and interpretations that reflect opinions and preference. A balanced approach to the use of qualitative and quantitative analysis is therefore recommended.

Common methodologies for gathering such information are described Table 3. Whilst qualitative in their approach, they can nevertheless often be expressed in quantitative terms in an *ex-post* assessment. For example, a common indicator used for qualitative measurements is that of ‘user satisfaction’. The users may include the client body and the population that uses the facility or services. It might also include community organisations that represent the beneficiary of intended outcomes from the project intervention.

The results of user satisfaction surveys can be expressed against a predetermined scale, with ‘success’ measured by the achievement of a minimum percentage of acceptable responses. While qualitative statements may also be used in such an assessment, care is needed to prevent undue bias or weighting being given to particular opinions. This is particularly the case where, over time, those able to contribute to such data collection are reduced in number (e.g. loss of project staff and ‘corporate memory’).

Table 3 – Quantitative and qualitative methodological tools for gathering audit evidence for ex-post assessments

	Methodological Tool	Purpose
Quantitative analysis	Audit of financial accounts	To assess whether financial operations of the PSP have been legally and regularly executed and accounts are reliable.
	Analysis of cost ratios	To factually compare expected versus actual costs. The expected costs can be defined by reference to benchmarks or pre-defined <i>ex-ante</i> targets.
	Analysis of performance data	To factually compare expected versus actual performance data measured by indicators or KPIs of the project. The expected performance may be defined by reference to an external benchmark or pre-defined <i>ex-ante</i> targets.
	Socio- economic analysis	To understand the socio-economic impact of the project taking into account both monetary and non-monetary aspects.
	Review of PPP contract clauses	To check compliance of performance with contractual requirements; review risk-transfer arrangements.
	User satisfaction surveys	Structured survey questions to assess the degree of satisfaction of the final users with the infrastructure or services provided.
Qualitative analysis	Owner/ contract manager satisfaction surveys	To assess the degree of satisfaction from the public authority with the infrastructure or services provided by the PPP project.
	Semi-structured 1:1 interviews with public sector and/or private sector managers	To provide additional information that can help interpret data collected from other sources. This can help understand quantitative data/trends.
	Workshops with relevant stakeholders	Structured and facilitated workshops arranged with relevant stakeholders to discuss and comment on the performance of the project/contract to collect qualitative data in a permissive and non-threatening environment.
	Engagement with third party interest (e.g. PPP industry groups)	Formal engagement with industry-representative bodies through structured group discussions or interviews with officers of the organisation.

By conducting an *ex-ante* user 'expectation' survey, the public authority can establish a baseline against which subsequent 'satisfaction' surveys may be measured and evaluated. Over time, and especially where changes to a service occur, there may be a need to re-calibrate the baseline and the level of satisfaction that is targeted or expected.

4.3. Standardisation and collection of performance data and indicators

The standardisation and central collection of performance data and of indicators across a PPP programme or programme series can help to:

- reduce transaction costs (i.e. not "re-inventing the wheel" each time a new PPP contract is negotiated);
- secure a more consistent quality of indicators;
- facilitate more consistent and comparable measurement methods;
- support the creation and maintenance of a centralised database which would allow comparison/benchmarking of projects within PPP programmes;
- facilitate more consistent performance audits and audit outcomes; and
- improve the opportunity for more relevant and reliable recommendations for process improvements.

Standardisation for PPPs can present some challenges given the wide variety of facilities, services and public authorities that might be involved. Nevertheless, attempts have been, or are being made, in some jurisdictions to introducing a certain level of common standards across programmed activities (see examples in Box 4).

4.4. Ex-ante benchmarking expectations with stakeholders

Different stakeholders can have different expectations from a project and consequently each will have a different frame of reference to measure success against. Their perception of the performance (and what is 'good' performance) may differ from that of the contracting authority. This is very often the case in circumstances where the use of PPP is a new delivery method for the services associated with the facility.

Good practice would suggest that a contracting authority establishes the expectations of the intended users of a facility or service in the *ex-ante* stages of the project. In this way the measure of 'success' and the value attached to aspects of the services are clearly understood and aligned as far as possible. As well as offering an initial agreed benchmark against which to measure future performance, it will also provide an opportunity to sense-check the user requirements that are described in the output specification when preparing the draft PPP contract (i.e. are they realistic?). This includes the calibration of the payment mechanism, any sensitivity to the weightings that are applied to deductions for unavailable areas and services and the periods allowed for responses to and rectification of service failures.

Box 4 – Examples of standardised approaches to data collection

- In France, the Mission Gestion Déléguée (within the Ministry of Justice) is responsible for the monitoring of penitentiary services where it has implemented a standard information collection system ('ISIS') that obliges those PSPs who are providing services to log and record performance in a standardised and harmonised manner. This allows them to have a common view of all contract management activities at both local and regional level. Quantitative KPIs are also available with the opportunity to monitor trends in contract performance across service lines (e.g. food safety management) and different contract service providers.
- Guidance from the Department of Expenditure & Reform in Ireland requires public authorities to maintain a cost database that could be used when benchmarking costs for future PPP projects together with a central risk database. The *ex-post* assessment of PPP projects is to be used to inform and update this risk database.⁴⁷
- In England, Health Trusts responsible for managing hospitals are required to provide data on costs and performance through the Estates Return Information Collection service ('ERIC'). It includes data for PPP and non-PPP projects on matters such as energy consumption and costs, waste volume and costs and maintenance costs. However, this information does not appear to specifically serve the needs of PPP projects/contracts.
- Building Schools for the Future (BSF), England was an investment programme in secondary school buildings in the 2000s. The delivery of the programme was overseen by Partnerships for Schools (PfS), a non-departmental public body. The Ministry of Education required PfS to collect data on the costs and prices of schools and establish a 'benchmarking system'. Difficulties were encountered in finding sufficient data on schools procured through other routes (than PPP) that would have provided a benchmark on their costs.⁴⁸

⁴⁷ "Guidelines for the Provision of Infrastructure and Capital Investments through Public Private Partnerships: Procedures for the Assessment, Approval, Audit and Procurement of Projects"; Section 2.11, Post Project Review; Department of Finance Ireland, 2006.

⁴⁸ "The Building Schools for the Future Programme: Renewing the secondary school estate", 2009, National Audit Office, UK; Case study (g) in Appendix B.

Appendix A: Examples of possible performance indicators based on a typical ex-ante logic model (after Figure 7)

	Input(s) →	Process(es) →	Output(s) →	Outcome(s)
PPP project preparation and planning	<p>Approved Business case requirements</p> <ul style="list-style-type: none"> Project definition Budget (affordability, comparator) Prioritised needs (with criteria) Risk matrix (transfer/share/keep) Societal and community benefits sought <p>Potential KPIs</p> <ul style="list-style-type: none"> Completeness (checklist) Risk allocation achieved services improvements in support of policy objectives ⁵⁰ 	<p>Tender competition</p> <ul style="list-style-type: none"> Tender administration Governance arrangements <ul style="list-style-type: none"> Programme achievement Results from audit of governance processes 	<ul style="list-style-type: none"> Compliant, affordable tenders Community and societal benefits Selected preferred tender Approvals Contract award <ul style="list-style-type: none"> Value achieved Compliance checks Contract reflects original risk matrix 	<ul style="list-style-type: none"> Affordable, improved VfM solution that promises to provide adequately maintained assets and public service delivery Realisation of community and societal benefits <p>Potential intervention success indicators⁴⁹</p> <ul style="list-style-type: none"> Affordable Whole-life cost < comparator Whole-life cost < comparable facilities Tender offer meets quality objectives Improvements over user requirements
Project implementation: Construction stage	<p>Contract requirements, including</p> <ul style="list-style-type: none"> Output specifications Date for start of contract and service delivery Agreed risk allocation <p>Potential KPIs</p> <ul style="list-style-type: none"> Completeness (checklist) Demand levels versus original assumptions Agreed risks transferred/shared 	<p>Design development and construction by PSP, including</p> <ul style="list-style-type: none"> Testing and certification Statutory approvals Service delivery planning by PSP Recruitment and training Information systems design, testing and implementation <ul style="list-style-type: none"> Results from audits of Quality and Environmental, Health & Safety Management Systems Accident record Delivery plans meet user requirements Stakeholder/user approval 	<ul style="list-style-type: none"> Asset constructed to required contract standard and on time Consents and certificates Trained, competent resources Service plans and systems to required standards start as planned; User satisfaction with service delivery plans and resource levels <ul style="list-style-type: none"> Design quality indicator(s) Programme achievement (dates) No cost change (increase) for CA Jobs created/supported, training places and apprenticeships offered Results of audit check processes Statutory certificates in place Health & safety record Baseline user satisfaction surveys 	<ul style="list-style-type: none"> Asset delivered on time and quality (or better) and with no additional cost Private sector innovations add efficiency and economy to performance of assets and services Improved sustainability Services ready to be delivered to quality and within predicted cost <p>Potential intervention success indicators</p> <ul style="list-style-type: none"> Start of service provision on time No change in costs (where no changes) Assessment of PSP innovations Employment and skills training outcomes Sustainability targets met SME supply-chain participation Efficiencies gained in realisation and commissioning of asset and services (innovation)

⁴⁹ These should, where possible, be clearly linked to the original objective of the intervention.

⁵⁰ Directive 2014/24/EU on Public Procurement identifies the role of public procurement in increasing the efficiency of public spending. This includes facilitating, for example, SMEs and enabling procurers to use public procurement in support of societal goals. Award criteria may include environmental and social aspects where they are relevant to the subject of the contract.

	Input(s) →	Process(es) →	Output(s) →	Outcome(s)
Project implementation : Operational stage, including delivery of services	<p>Operational and user requirements</p> <ul style="list-style-type: none"> Service delivery plan Help-desk requests Availability requirements Change requests Agreed risk allocation <p>Potential KPIs</p> <ul style="list-style-type: none"> Completeness (checklist) Version and date control Availability of help desk Completeness, accuracy of records Actual demand levels vs original assumptions; trends. Agreed risks transferred/shared 	<p>Contract management</p> <ul style="list-style-type: none"> Payment mechanism Performance measurement and audit Benchmarking/value testing Change management <p>Timeliness of invoicing and payment</p> <p>Results from audits of Quality and Environmental, Health & Safety Management Systems</p> <p>Version and date control of price indices (up-to-date)</p> <p>Programmed monitoring activities and performance audits completed on time</p> <p>Reports and records on time, complete and accurate</p> <p>Safeguarding of financial model and original inputs, agreed changes</p> <p>Adequate resource levels maintained (private and public)</p>	<ul style="list-style-type: none"> Performance reports and audits Payment with deduction for poor performance Warning notices for persistent under-performance/Termination Benchmarking reports, value tests Changes to services or assets <p>Completeness, accuracy of reports</p> <p>Level of deductions made (monthly, annual, rolling period)</p> <p>Number of service failures, unavailability of spaces, etc.</p> <p>Average rectification periods</p> <p>Results of performance audits</p> <p>Value of changes made</p> <p>Results of quality audits of service delivery standards</p> <p>User satisfaction survey results</p> <p>Number of warning notices</p> <p>Results of benchmarking and value testing (no increase in cost)</p> <p>Community engagement activities delivered</p>	<ul style="list-style-type: none"> Affordable, improved VfM solution that provides adequately maintained assets and public service delivery More timely correction of any under-performance of services with fewer and shorter periods of unavailability of services/spaces <p>Potential intervention success indicators</p> <ul style="list-style-type: none"> Service provision continues to meet/exceed expectations No change in costs (where no changes) Continuous improvement savings, eg. through benchmarking SME participation rates in supply chain Qualitative assessment of additional innovation No increase time input from users into asset operation issues Continue to meet/or exceed sustainability targets Partnership sharing of lessons learned and continuous improvement measurement indicators Community and societal benefits realised
Contract expiry	<p>Output specifications</p> <p>Date for end of service delivery</p> <p>Potential KPIs</p> <ul style="list-style-type: none"> Timeliness of end date (no extension, shortening) No change to requirements 	<p>Asset condition survey</p> <p>Timeliness of completion of programmed monitoring activities including performance audit</p>	<ul style="list-style-type: none"> Building or infrastructure has residual life to required contract standard at and of contract term <p>Programme achievement</p> <p>No cost change (increase) for Contracting Authority</p> <p>Results of audit of certification [of quality, compliance] processes</p> <p>Residual value</p>	<ul style="list-style-type: none"> Improved asset condition at end of contract term with improved (expected, no worse) value-for-money outcome <p>Potential intervention success indicators</p> <ul style="list-style-type: none"> Expected VfM achieved Expected project objectives achieved SME participation rates and local economic benefits realised Employment skills and training outcomes Sustainability targets achieved Community and societal benefits realised Residual value/design life preserved

Appendix B: Case Studies

Ref	Title of Report	Year	Sponsor of evaluation review	Country	Performed by	Ex-Post Review type	Quantitative Evaluation	Qualitative Evaluation
a	The Termination of the PFI Contract for the National Physical Laboratory	2006	National Audit Office	UK	SAI	Project review	○	●
b	Belfast Metropolitan College's Titanic Quarter PPP Project	2014	Northern Ireland Audit Office	UK	SAI	Project review	○	●
c	Review of MoD PFI Projects in Construction and Operation	2005	Ministry of Defence, PPP Unit	UK	Government agency	Programme review		●
d	The performance and management of hospital PFI contracts	2010	National Audit Office	UK	SAI	Programme review	○	●
e	Contract Management in DBFMO Projects	2010	Algemene Rekenkamer (Court of Audit)	Netherlands	SAI	Programme review	○	●
f	Étude sur la performance des contrats de partenariat	2011	MAPPP, PPP Unit	France	Government agency	Programme review	●	
g	The Building Schools for the Future Programme	2009	National Audit Office	UK	SAI	Programme review	○	●
h	Review of Operational PFI/PPP/NPD Projects	2011	Scottish Futures Trust	UK	Government agency	Programme review	●	○
i	La performance des contrats de partenariat en France : Une première évaluation intégrant la phase d'exploitation	2012	Chaire EPPP, IAE de Paris - Pantheon - Sorbonne.	France	Industry body	Programme review		●
j	Les partenariats public privé du plan hopital 2007 : une procédure mal maîtrisée	2014	Cour des Comptes	France	SAI	Programme Review		●
k	The Grouped Schools Pilot Partnership Project	2004	Comptroller & Auditor General	Ireland	SAI	Programme + Policy review	○	●
l	Life-cycle model evaluation Finland	2013	The Finnish Transport Agency	Finland	Government agency	Programme + Policy review		●
m	Review of Partnerships Victoria provided Infrastructure	2004	Treasurer of the Australian Government.	Australia	Government body	Policy review		●
n	A new approach to public private partnerships	2012	HM Treasury	UK	Government body	Policy review		●
o	Les contrats de partenariat : des bombes à retardement	2014	Senat de France	France	Parliamentary body	Policy review		●
p	Report on the performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects	2008	National PPP Forum, Infrastructure Australia	Australia	Government agency	Comparative study	●	
q	Annual Report 2008: Chapter 17 - Courts Service, The Criminal Courts of Justice (PPP) Building	2008	Comptroller & Auditor General	Ireland	SAI	Thematic review		●
r	Review of Lessons from completed PPP Projects financed by the EIB	2009	European Investment Bank	n/a	IFI	Thematic review	○	●
s	PFI Costs and benefits (Briefing paper)	2015	House of Commons Library	UK	Parliamentary body	Thematic review	○	●
t	The choice of finance for capital investment	2015	National Audit Office	UK	SAI	Thematic review	●	○
u	Dispelling the Myths: A Pan-Canadian Assessment of Public-Private Partnerships for Infrastructure Investments	2010	The Conference Board of Canada	Canada	Industry body	Thematic review + Programme review	●	●
v	Breaking New Ground: P3 Hospitals in Canada	2011	The Canadian Council for Public-Private Partnerships (CCPPP)	Canada	Industry body	Thematic review + Programme review		●
w	Audit Commission - PFI in schools	2003	Audit Commission	UK	SAI	Thematic review + Best practice guidance	○	●
x	Effectiveness of operational contracts in PFI	2007	KPMG LLP (UK) and The Business Services Association	UK	Industry body	Thematic review + Best practice guidance		●
y	Key Performance Indicators in Public-Private Partnerships	2011	Federal Highway Administration, Department of Transportation	USA	Government agency	Thematic review + Best practice guidance		●
z	A Framework for evaluating the implementation of Private Finance Initiative projects	2006	National Audit Office	UK	SAI	Best practice guidance		●
aa	OGC Gateway™ Process Review 5: Operations review and benefits realisation	2007	HM Treasury	UK	Government body	Best practice guidance		●
bb	Highway PPPs: More rigorous up-front analysis could better secure potential benefits and protect the public interest	2008	Government Accountability Office	USA	Government body	Programme + Policy review		●

- Primary methodology
- Secondary methodology

(a)	The Termination of the PFI Contract for the National Physical Laboratory	
Promoter:	National Audit Office, UK	
Authors:	National Audit Office, UK	
Date:	2006	
Nature of Ex Post Assessment		
Type	PPP Project audit	
Main purpose	<ul style="list-style-type: none">• audit and value for money consequences arising from the termination of a PPP contract• examination of problems that led to termination and identify lessons that might be applied to other PPP contracts	
Methodology	Structured performance audit comprising: <ul style="list-style-type: none">• a review of all files• interviews with key parties• observations of selected scientific research conducted in the existing buildings• desk-top studies of selected problems encountered in the new facilities• high level validation of the assessed termination sum, including assumptions made and inputs used in its determination	
Report format	<ul style="list-style-type: none">• presentation of historical timeline of activities through the project appraisal and development stages through to the procurement and award stages• discussion of the funding arrangements including the proposed PPP structure• discussion of key audit findings and value for money conclusion• recommendations for future actions related to the project based on audit findings (lessons learned)• recommendations applicable to other public bodies undertaking similar projects, based on the audit findings	
Timing	Contract expiry	
Promoter-type	National Supreme Audit Institution	
Link	www.nao.org.uk/wp-content/uploads/2006/05/05061044.pdf	

(b) Belfast Metropolitan College's Titanic Quarter PPP

Promoter: Northern Ireland Audit Office, UK

Authors: Northern Ireland Audit Office, UK

Date: 2014

Nature of Ex Post Assessment

Type: PPP Project audit

Main purpose:

- audit and value for money assessment of the Belfast Metropolitan College's Titanic Quarter PPP Project

Methodology: Structured performance audit comprising:

- desk-top review of contract documents, and internal project reports
- structured interviews with relevant staff and stakeholders responsible for the project
- consultation with 'relevant third parties'

Report format:

- presentation of historical timeline of activities through the project appraisal and development stages through to the procurement and award stages
- discussion of the funding arrangements including the proposed PPP structure
- discussion of key audit findings and value for money conclusion
- recommendations for future actions related to the project based on audit findings (lessons learned)
- recommendations applicable to other public bodies undertaking similar projects, based on the audit findings

Timing: Conclusion of construction stage

Promoter-type: National Supreme Audit Institution

Link: www.niauditoffice.gov.uk/bmc_report.pdf

(c)	Review of MoD PFI Projects in Construction and Operation
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Promoter:	Ministry of Defence, UK
Authors:	Ministry of Defence Private Finance Unit, UK
Date:	2005

Nature of Ex Post Assessment

Type	Programme review
Main purpose	<ul style="list-style-type: none"> performance review of 29 operational PFI projects in delivering procurement outcomes through use of PFI enable development of best practice
Methodology	Structured performance audit comprising: <ul style="list-style-type: none"> desk-top review of contract documents, and internal project reports structured interviews with contract management and monitoring teams responses to survey issued to contract management and monitoring teams
Report format	<ul style="list-style-type: none"> statistical presentation of survey results (timeliness, levels of satisfaction with performance through rating scale) high level assessment of outcomes from survey and observed patterns including non-conformance with application of contract management regime initial identification of 'best practice' in contract management recommendations for improvement areas in the contracts and behaviours of contract management teams
Timing	Operational phase
Promoter-type	Government agency
Link	www.bipsolutions.com/docstore/doc/12156.doc

(d)	The performance and management of hospital PFI contracts	
Promoter:	National Audit Office, UK	
Authors:	National Audit Office, UK	
Date:	2010	
Nature of Ex Post Assessment		
Type	Programme review	
Main purpose	<ul style="list-style-type: none">· examine the performance of the maintenance and support services under hospital PPP contracts and how they are managed by the relevant public authority during the operational phase so as to most of the contract and their relationship with the PSPs and get the services expected.· examine how the Department of Health supports public authorities in the management of the PPP contracts and how it balances supporting local delivery with allowing [public authorities] to manage their affairs.	
Methodology	<ul style="list-style-type: none">· 76 operational PPP contracts were selected· an online survey sent to the [National Health] Trusts which operated the PPP contracts addressing (defined as ‘value for money’ criteria:<ul style="list-style-type: none">○ conformity of the performance of the service provider in meeting the contract requirements (and so meeting the needs of users)○ conformity of practice by public authority in managing the contract (and in line with best practice)○ level of support provided by central government department to public authorities in managing the contracts	
Report format	<ul style="list-style-type: none">· presentation of findings from interviews and data analysis· description of lessons learned· statement on achievement of value for money	
Timing	Operational phase	
Promoter-type	National Supreme Audit Institution	
Link	www.nao.org.uk/wp-content/uploads/2010/06/101168.pdf	

(e)	Contract management in DBFMO projects
Promoter:	Algemene Rekenkamer (The Court of Audit) Netherlands
Authors:	Algemene Rekenkamer
Date:	2010
Nature of Ex Post Assessment	
Type	Programme review
Main purpose	To gain an understanding of the use of DBFMO in practice and specifically of the performance of contract management.
	<p>To examine whether:</p> <ul style="list-style-type: none"> the government steered and controlled the implementation of DBFMO projects so as to safeguard the public interests effectively the House of Representatives was adequately informed of the financial and other consequences of DBFMO projects
Methodology	<p>For five selected projects,</p> <ul style="list-style-type: none"> to conduct a performance audit of the application of the contract management mechanisms and how contract changes review of the main documents for each project, including the DBFMO contracts with all appendices, change contracts, communication between the government and the private consortium (including minutes and correspondence) and data from the monitoring systems interviews with the persons responsible for the day-to-day implementation of the contract and had access to logbooks. <p>Note: No comparison was made of the PPP (DBFMO) contracts and more traditional forms of contracting in the report.</p>
Report format	<p>Conclusions and recommendations on:</p> <ul style="list-style-type: none"> DBFMO contract management Provision of information to the Parliament Specific recommendations to Government Ministries and to Parliament <p>Responses to audit findings from Ministries</p>
Timing	Operational phase
Promoter-type	National Supreme Audit Institution
Link:	www.courttofaudit.nl/english/Publications/Audits/Introductions/2013/06/Contract management of DBFMO projects

(f)	Étude sur la performance des contrats de partenariat
Promoters:	MAPPP, Mission d'Appui aux PPP (French PPP unit)
Authors:	PwC France
Date:	2011
Nature of Ex Post Assessment	
Type	Programme review
Main purpose	Quantitative assessment of planned and actual out-turns of completion dates and costs to identify trends in terms of delays and cost overruns within PPPs in France.
Methodology	<ul style="list-style-type: none"> 60 projects initially selected from 106 signed between 2002 and 2011 across a broad range of sectors (including health, schools, public administration buildings, sport facilities, prisons, street lighting, telecommunication and environment) information gathered from 34 of these by way of questionnaire sent to public and private sector participants/stakeholders for the projects
Report format	<ul style="list-style-type: none"> statistical presentation of numbers of projects achieving objectives of timely completion, cost conformance statistical breakdown of reasons attributed by respondents for conforming or non-conforming performance
Timing	Completion of construction
Promoter-type	Central government departmental agency
Link	Summary document ("communiqué de presse") may be found at www.pwc.fr/assets/files/cdp/2011/10/pwc_cdp_2011-10-10_partenariats_public_prive.pdf

(g)	The Building Schools for the Future Programme: Renewing the secondary school estate
Promoter:	National Audit Office, UK
Authors:	National Audit Office, UK
Date:	2009
Nature of Ex Post Assessment	
Type	Programme review
Main purpose	To review progress in the delivery of the BFS programme of school PPP projects.
Methodology	<ul style="list-style-type: none"> • seven case studies using semi-structured interviews and focus groups with relevant stakeholders as well as a review of documentation held by the Promoter on the case studies; • a census of all public and private participants to the programme; • interviews with relevant staff with the Ministry and Promoter; • a review of other documentation held by the Ministry and Promoter related to the Programme; and • use of existing evidence.
Report format	<ul style="list-style-type: none"> • Summary of activities and achievements to date; and • Recommendations on performance measurement and data collection for reference by future programmes and related activities.
Timing	c. 5 years after the launch of the BSF Programme
Promoter-type	National Supreme Audit Institution
Link	www.nao.org.uk/wp-content/uploads/2009/02/0809135.pdf

(h)	Review of Operational PFI/PPP/NPD Projects
Promoter:	Scottish Futures Trust
Authors:	Scottish Futures Trust
Date:	2011
Nature of Ex Post Assessment	
Type	Programme review
Main purpose	<ul style="list-style-type: none"> to assess whether there were value for money savings to be realized and, if so, how that might be achieved.
Methodology	<ul style="list-style-type: none"> review of contract documents and financial models for selected projects interviews with relevant public authorities and stakeholders
Report format	Recommendations on methods of achieving the operational savings identified from the review.
Timing	Operational phase
Promoter-type	Central government agency
Link	www.scottishfuturestrust.org.uk/files/publications/Review of Operational PPP Projects June 2011.pdf

(i)	La performance des contrats de partenariat en France : une première évaluation intégrant la phase d'exploitation
Promoter:	Chaire EPPP, IAE de Paris-Panthéon-Sorbonne
Authors:	Stéphane SUASSIER and Phuong Tra TRAN
Date:	2012
Nature of Ex Post Assessment	
Type	Programme review
Main purpose	A qualitative assessment of the performance both in construction and during early years of operation.
Methodology	<ul style="list-style-type: none"> • 30 projects selected from 46 operational contracts (from 155 signed up to and during 2012) across a broad range of sectors (including health, schools, public administration buildings, sport facilities, prisons, street lighting, telecommunication and environment) • document review of signed contracts • qualitative performance evaluated in terms of conformance with i) construction cost; ii) construction programme; iii) quality of the construction; iv) operational cost; v) performance objectives during operations; and vi) overall 'quality vs. price' (or value for money) <ul style="list-style-type: none"> ○ Questionnaires using a 6-point qualitative scale ['not satisfactory at all' to 'highly satisfactory'] sent to public and private sector participants/stakeholders to the projects ○ Semi-structured interviews with procuring authorities
Report format	Statistical presentation of findings from questionnaires/ interviews qualitative assessment against the 6-point scale
Timing	Construction phase and average approx. 3-years into operations phase
Promoter-type	Research group
Link	www.chaire-eppp.org/files_chaire/contrat_de_partenariat_performance.pdf

**(j) Les partenariats public-privé du plan Hôpital 2007 : une procédure mal maîtrisée
("PPP projects from the Hospital Plan 2007: a poorly managed process")**

Promoter: Cour des Comptes, France

Authors: Cour des Comptes⁵¹

Date: 2014

Nature of Ex Post Assessment

Type	Programme review
Main purpose	To capture experience from past PPP projects in the health sector order to assess the effectiveness of the procurement model and to make recommendations for its further development
Methodology	<ul style="list-style-type: none"> review of a series of individual project reviews carried out by the Cour des Comptes' local representations (Chambres régionales des comptes) stakeholder interviews analysis of available relevant documentation <p>The analysis followed both a sequential approach (procurement, construction phase and operational phase) and a topical one (risk allocation, and financing solutions).</p>
Report format	<ul style="list-style-type: none"> a review of application of PPPs in sector with reference to other jurisdictions (notably UK) commentary on implementation practice and issues that arose in individual case studies review of conformance with expected outcomes on time and cost recommendations for strengthening institutional and procedural arrangements response of the government authority(ies) to the audit findings
Timing	Start of operations
Promoter-type	National Supreme Audit Institution
Link	www.ccomptes.fr/content/download/64944/1553599/version/1/file/3_5_partenariats_public_privé_plan_hopital_2007_Tome I.pdf

⁵¹ Rapport public annuel 2014 – février 2014

(k)	The Grouped Schools Pilot Partnership Project	
Promoter:	Comptroller and Auditor General, Ireland	
Authors:	Comptroller and Auditor General, Ireland	
Date:	2004	
Nature of Ex Post Assessment		
Type	PPP Project audit	
Main purpose	<ul style="list-style-type: none">• audit the project development and evaluation process and the negotiation of the PPP contract.• compliance audit (with national PPP guidelines)• VfM evaluation of the PPP contract• Identify any lessons learned that might be applied to other PPP contracts	
Methodology	Structured performance audit comprising: <ul style="list-style-type: none">• file review of project documents• interviews with key parties (public and private) and including visits to 3 (of 5) schools and interviews with the schools' principals.• analysis of activities leading through the definition of the project, negotiation of the contract, the contract structure, timeliness, cost (including cost of project finance); project management and evaluation arrangements• analysis of the process for selecting of the best offer	
Report format	<ul style="list-style-type: none">• discussion of activities and decisions made through the development, assessment and management of the project.• assessment of the analyses performed on each of the activities examined• examination of outcomes from the assessment performed and lessons learned• recommendations for future actions related to the preparation and assessment of PPP projects• recommendations applicable to other public bodies procuring similar projects and for guidance	
Timing	PPP Contract award	
Promoter-type	National Supreme Audit Institution	
Link	www.audgen.gov.ie/documents/vfmreports/48_SchoolsPP_P.pdf	

(I)	Elinkaarimallin jälkiarviointi (“Life-cycle model ex Post Evaluation”)
Promoter:	Liikennevirasto (Finnish Transport Agency)
Authors:	Liikennevirasto
Date:	2013
Nature of Ex Post Assessment	
Type	Programme and policy review
Main purpose	To capture the experiences from past PPP projects in order to assess the effectiveness of the procurement model and to make recommendations for its further development
Methodology	<ul style="list-style-type: none"> • stakeholder interviews • analysis of procurement and contract documentation <p>The analysis followed both a sequential approach (procurement, construction phase and operational phase) and a topical one (risk allocation, and financing solutions).</p>
Report format	<ul style="list-style-type: none"> • four case studies reviewed (road, rail) • assessment of performance of the procurement and delivery activities • review of issues affecting funding, risk sharing and the payment mechanism
Timing	Start of operations
Promoter-type	Government agency
Link	www.liikennevirasto.fi/julkaisut/pdf3/lr_2013_elinkaarimallin_jalkiarviointi_web.pdf

(m)	Review of <i>Partnerships Victoria</i> provided Infrastructure
Promoter:	Treasurer to the Government of the State of Victoria, Australia
Authors:	Peter FITZGERALD
Date:	2004
Nature of Ex Post Assessment	
Type	Policy review
Main purpose	To inform policy development in implementing PPP projects
Methodology	<ul style="list-style-type: none"> desktop review of guidance materials published by the promoter, the contracts and evaluation documents of the first eight projects delivered and the details of the five projects under delivery at the time structured interviews with stakeholders and relevant organisations public consultation of draft report by electronic exchange (through website)
Report format	<ul style="list-style-type: none"> summary description of findings recommendations on policy changes or enhancements recommendations for institutional and procedural development and improvement
Timing	Construction stage (5 of 13); start of operations (8 of 13)
Promoter-type	National [independent] government body
Link	www.un.org/esa/coordination/Alliance/PPPInfrastructure.pdf

(n)	A new approach to public private partnerships
Promoter:	HM Treasury, UK
Authors:	HM Treasury, UK
Date:	2012
Nature of Ex Post Assessment	
Type	Policy review
Main purpose	<ul style="list-style-type: none"> • present the conclusions of Government-led review of UK's PFI model • set out proposed new policy and procedural approaches to delivery of private finance in the delivery of public infrastructure and services
Methodology	<p>Structured review process comprising a 'call for evidence' questionnaire. Responses were submitted as part of a wide-spread, public consultation process.</p> <ul style="list-style-type: none"> • the review and assessment of responses received • follow-up engagement with public and private sector stakeholders • preparation of proposals which were also subject to consultation with some stakeholders
Report format	<p>A review of the UK's Private Finance Initiative with specific proposals and recommendations presented to address:</p> <ul style="list-style-type: none"> • equity finance • improving project delivery • providing more flexible service provision • providing greater transparency • risk allocation • efficiency and value for money • debt finance • summary of call for evidence responses • list of respondents to call for evidence
Timing	Policy review
Promoter-type	Central Government authority
Link	<p>www.gov.uk/government/uploads/system/uploads/attachment_data/file/205112/pf2_infrastructure_new_approach_to_public_private_partnerships_051212.pdf</p>

(o)	Les contrats de partenariat : des bombes à retardement? ⁵²
Promoter:	Sénat de France
Authors:	Sénateurs Jean-Pierre SUEUR and Hugues PORTELLI
Date:	2014
Nature of Ex Post Assessment	
Type	Policy and periodic review
Main purpose	To assess the benefits and limitations of PPP contracts and the financial risks they pose both for the State and for local communities.
Methodology	<ul style="list-style-type: none"> reviews of various publically available and confidential reports of work performed by various French public audit institutions (including the National Audit Office, General Inspectorate for Finance, General Committee for Environment and Sustainable Development) a review of French jurisprudence related to the use of the 'contrat de partenariat' since its establishment in 2004
Report format	<ul style="list-style-type: none"> parliamentary report with an outline of recommendations on both policy and procedural matters under a series of headings: <ul style="list-style-type: none"> clarify the availability of the use of PPPs under law improve SME access to these public contracts guidance on their use and application and resource needs improved information and resources at regional level
Timing	Operational stage
Promoter-type	National Parliamentary body
Link	www.senat.fr/rap/r13-733/r13-7331.pdf

⁵² RAPPORT D'INFORMATION fait au nom de la commission des lois constitutionnelles, de législation, du suffrage universel, du Règlement et d'administration générale (1) sur les partenariats publics-privés; No 733 enregistré à la Présidence du Sénat le 16 juillet 2014.

(p) Report on the performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects

Promoter: National PPP Forum, Infrastructure Australia

Authors: Colin DUFFIELD, Peter RAISBECK, Ming XU; University of Melbourne

Date: 2008

Nature of Ex Post Assessment

Type	Comparative study
Main purpose	Quantitative analysis: benchmark a sample of PPP projects against a representative sample of traditionally-procured infrastructure projects on time and cost performance indicators.
Methodology	<ul style="list-style-type: none"> · using a standardised template for data collection, 25 operational PPP projects and 42 non-PPP projects were selected from across 7 Australian states and a broad range of sectors (transportation, education, health, IT and water) · project phases of both PPPs and traditional procured projects were divided into four distinct time periods from initiation to contract award to assess relative performance of each · qualitative performance evaluated in terms of conformance with i) construction cost and ii) construction programme
Report format	<ul style="list-style-type: none"> · statistical presentation of numbers of projects achieving objectives of timely completion across the four time periods reviewed and the cost conformance, with comparisons made between PPP and non-PPP projects · statistical analysis of confidence limits for on time or on cost delivery and comparison of PPP and non-PPP projects · an assessment of the likely reasons for non-conformance with expected cost or time outcomes (based on interviews with stakeholders and participants)
Timing	Start of operations
Promoter-type	National [independent] government body
Link	www.infrastructureaustralia.gov.au/policy-publications/publications/files/PC_Submission_Attachment_K.pdf

(q)	Annual Report 2008: Chapter 17: Courts Service, The Criminal Courts of Justice (PPP) Building	
Promoter:	Comptroller and Auditor General, Ireland	
Authors:	Comptroller and Auditor General, Ireland	
Date:	2008	
Nature of Ex Post Assessment		
Type	PPP Project audit	
Main purpose	<ul style="list-style-type: none">• audit the project development and evaluation process and the negotiation of the PPP contract.• compliance audit (with national PPP guidelines)• identify any lessons learned that might be applied to other PPP contracts	
Methodology	Structured performance audit comprising: <ul style="list-style-type: none">• file review of project documents• interviews with key parties• analysis of selected activities: the business case; PPP procurement approach; public sector comparator model and inputs; the tender evaluation process; and of the final negotiation and contract as awarded	
Report format	<ul style="list-style-type: none">• discussion of activities and decisions made through the project appraisal and development, procurement and award stages• assessment of the analyses performed on each of the business case; PPP Procurement approach; public sector comparator model and inputs; the tender evaluation process; and of the final negotiation and contract as awarded• discussion of conclusions concerning compliance (with national guidelines)• recommendations for future actions related to the preparation and assessment of PPP projects• recommendations applicable to other public bodies procuring similar projects	
Timing	PPP Contract award	
Promoter-type	National Supreme Audit Institution	
Link	www.audgen.gov.ie/documents/annualreports/2008/Appropriation_Account_2008Rev1.pdf Chapter 17; pages 169 - 186	

(r)	Review of lessons from completed PPP projects financed by the EIB
Promoter:	European Investment Bank
Authors:	Robert BAIN
Date:	2009
Nature of Ex Post Assessment	
Type	a) Literature review of reported experience of others b) Qualitative and partial quantitative (time overrun, costs) assessment
Main purpose	To summarise lessons learned and identify project success factors across a portfolio of PPP projects that were financed by the EIB and which are operational by drawing from the experience of EIB staff and a review of the State of the Art in global practice.
Methodology	<ul style="list-style-type: none"> 66 operational projects selected from over 200 contracts that would be classified as PPP or have similar characteristics across a broad range of sectors (mostly highways but also including other transportation, education, health, power and water) review EIB's own project and credit monitoring documentation literature review of international practice (especially UK, Australia and World Bank) and documented 'lessons learned' semi-structured interviews with EIB staff
Report format	<ul style="list-style-type: none"> statistical presentation of numbers of projects achieving objectives of timely completion, cost conformance description of reasons attributed by interviewees for conforming or non-conforming performance presentation of observed 'best practice'
Timing	Average approx. 3-years operations phase
Promoter-type	International Financial Institution
Link	www.robain.com/Review%20of%20Lessons%20from%20Completed%20PPP%20Projects%20Financed%20by%20the%20EIB.pdf

(s)	PFI Costs and Benefits (Briefing Paper)
Promoter:	House of Commons, UK
Authors:	House of Commons Library, UK
Date:	2015
Nature of Ex Post Assessment	
Type	Thematic review
Main purpose	Research briefing to inform parliamentary discussions
Methodology	<ul style="list-style-type: none"> · review of published public databases from government and other public authority sources as well as from parliamentary reports and committees. · review of National Audit Office findings · largely evidentiary-based approach with some reporting of surveys from non-public sources
Report format	<ul style="list-style-type: none"> · summary of statistical information on use and prevalence of PFI usage. · summary of previously reported findings from national audit institution
Timing	Operational phase
Promoter-type	National Parliamentary body
Link	www.researchbriefings.files.parliament.uk/documents/SN06007/SN06007.pdf

(t)	The choice of finance for capital investment
Promoter:	National Audit Office, UK
Authors:	National Audit Office, UK
Date:	2015
Nature of Ex Post Assessment	
Type	Thematic review
Main purpose	<ul style="list-style-type: none"> • Briefing paper to consider capital expenditure and how government chooses to finance it • Provide observations on choices available
Methodology	<ul style="list-style-type: none"> • review of published public databases from government and other public authority sources as well as from parliamentary reports and committees • review of National Audit Office findings on general capital expenditure • largely evidentiary-based approach with some reporting of surveys from non-public sources
Report format	<ul style="list-style-type: none"> • summary of statistical information on public capital expenditure and trends in public finance. • summary of trends in the private financing of public capital expenditure • presentation of assurances processes governing decision making in the making and control of capital expenditure • summary performance assessment of delivery practices • summary of current developments in infrastructure financing
Timing	Operational phase
Promoter-type	National Supreme Audit Institution
Link	<u>www.nao.org.uk/report/the-choice-of-finance-for-capital-investment/</u>

(u)	Dispelling the Myths: A Pan-Canadian Assessment of Public-Private Partnerships for Infrastructure Investments
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Promoter:	Alberta Treasury Board, Infrastructure Ontario, Infrastructure Québec, Partnerships British Columbia, PPP Canada and The Canadian Council for Public-Private Partnerships
Authors:	Mario IACOBACCI, on behalf of The Conference Board of Canada
Date:	2010

Nature of Ex Post Assessment

Type	Thematic review/Programme review
Main purpose	To inform public policy on PPPs through a 'State-of-the-art' assessment of PPP projects in Canada and interviews with practitioners, policy makers and academics.
Methodology	<ul style="list-style-type: none"> • desk-top review of published literature from national and mature international markets (notably UK and Australia) • structured interviews with PPP practitioners from public and private sectors and academics • data collected in standardised format from 55 selected PPP projects procured by Canadian public authorities from across various sectors (health, transport, social infrastructure, water) of which 19 had started operations • four case study pairs examined, each pair being comparable PPP and non-PPP projects
Report format	Series of conclusions drawn from comparative analyses conducted and of conformance with planned costs and programme. Identification of 'efficiency drivers' (analogous to 'best practice')
Timing	Start of operations
Promoter-type	Regional public authorities and a not-for-profit public-private forum
Link	www.fengatecapital.com/DispellingTheMythsRpt WEB1.pdf

(v)	Breaking new ground: P3 Hospitals in Canada
Promoter:	The Canadian Council for Public-Private Partnerships (CCPPP)
Authors:	CCPPP in association with Raymond Chabot Grant Thornton
Date:	2011
Nature of Ex Post Assessment	
Type	Programme review; Thematic review
Main purpose	To inform policy development in implementing PPP projects
Methodology	<ul style="list-style-type: none"> · Broadly a qualitative analysis based on semi-structured interviews and seven selected case studies. · Value-for-money comparisons made by reference to <i>ex-ante</i> analyses.
Report format	Series of conclusions drawn from comparative analyses conducted and of conformance with planned costs and programme.
Timing	Start of operations
Promoter-type	A not-for-profit public-private forum
Link	www.pppcouncil.ca/pdf/breaking_new_ground_toc.pdf

(w)	PFI in schools
Promoter:	Audit Commission, UK
Authors:	Audit Commission, UK
Date:	2003
Nature of Ex Post Assessment	
Type	Best Practice Guidance (based on lessons learned reported in previous performance audits)
Main purpose	a) identify issues to be considered in evaluating the effective planning and implementation of PPPs; and b) describe audit criteria and evaluation methodology
Methodology	<ul style="list-style-type: none"> interviews with stakeholders and procuring authorities in nine local educational authorities (LEAs) combination of a qualitative questionnaire and semi-structured interviews held with users (teaching and support staff and older pupils) an independent, technical research institute made a qualitative assessment of school facilities (architectural design, temperature, light, acoustics) using a purpose designed evaluation tool cost comparison of outturn costs with of traditionally financed schemes for capital costs and operating on a 'like-for-like' basis (where available) data collection from <i>ex-ante</i> studies (affordability, VfM and business cases) and procurement processes
Report format	<ul style="list-style-type: none"> presentation of findings from interviews and data analysis description of lessons learned recommendations for changes to aspects of policy, future improvements to processes and preparation and dissemination of 'Best Practice' guidance.
Timing	To span all phases from initial strategic analysis to operations
Promoter-type	Regional public audit body, UK

(x)	Effectiveness of operational contracts in PFI
Promoter:	Infrastructure Australia
Authors:	KPMG, UK
Date:	2007
Nature of Ex Post Assessment	
Type	Thematic review; 'Best Practice' guidance
Main purpose	To provide reference or benchmark data and trend analysis of the market and of PPP contracts for the PPP industry
Methodology	<ul style="list-style-type: none"> survey based on the responses of 93 contract managers in the private sector, across a range of PFI services in the UK (during 2006)
Report format	<ul style="list-style-type: none"> statistical presentation of survey results (behaviours, levels of satisfaction/conformance) high-level assessment of outcomes from survey and observed patterns
Timing	Operations phase
Promoter-type	Private company
Link	www.infrastructureaustralia.gov.au/policy-publications/publications/files/Effness of PFI KPMG UK.pdf

(y)	Key Performance Indicators in Public-Private Partnerships
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Promoter:	US Department of Transportation - Federal Highway Administration in co-operation with American Association of State Highway and Transportation Officials and National Cooperative Highway Research Program
Authors:	Michael GARVIN, Keith MOLENAAR, Desiderio NAVARRO and Gordon PROCTOR
Date:	2011

Nature of Ex Post Assessment	
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Type	Thematic review; Best Practice guidance
Main purpose	To provide State and federal agencies with a 'state-of-the-practice' description of US and international practice for developing key performance indicators (KPIs) in PPPs that are aligned with 'overarching performance measures' in designing, constructing, operating, and maintaining transportation facilities.
Methodology	<ul style="list-style-type: none"> • desk-top literature review of international and domestic approaches to performance management and KPIs • case study selection from Australia, Canada, UK and the United State • analysis of observed patterns on operations and maintenance, design and construction and handback requirements as well as KPI evolution
Report format	<ul style="list-style-type: none"> • description of research findings and results • data set collected • recommendations for further exploration or development
Timing	Operations phase
Promoter-type	Federal government body/agency
Link	www.international.fhwa.dot.gov/pubs/pl10029/pl10029.pdf

(z)	A Framework for evaluating the implementation of Private Finance Initiative projects
Promoter:	National Audit Office, UK
Authors:	National Audit Office, UK
Date:	2006
Nature of Ex Post Assessment	
Type	Thematic review and Best Practice Guidance (based on lessons learned reported in previous performance audits)
Main purpose	<ul style="list-style-type: none"> a) Identify issues to be considered in evaluating the effective planning and implementation of PPPs. b) Describe audit criteria and evaluation methodology
Methodology	<ul style="list-style-type: none"> · collation, analysis and summary of outputs from prior reports published by the organisation · account was also made of observations from other government departments and sector agencies involved in PPP policy and programme implementation (including HM Treasury, Partnerships UK and 4Ps) and the then current Treasury Budget 2006 publication, "PFI: Strengthening Long-Term Partnerships"
Report format	<p>The first part of the document outlines an evaluation framework covering the six distinct lifecycle phases of projects from initial strategic analysis to the mature operational phase, in terms of indicators that span six key business management themes. The framework is intended for use primarily by assessors, but also for those implementing PFI projects on a day-to-day basis. Many of the issues considered are applicable to non-PFI procurements.</p> <p>In the second part of the document a detailed explanation of audit criteria is provided, outlining the assessment approach that can be used in practice. Specifically, a template set of questions is provided for each indicator, highlighting the key issues that an assessor should take into account when determining whether the indicators for a theme have been met.</p>
Timing	To span all phases from initial strategic analysis to operations
Promoter-type	National Supreme Audit Institution
Link	<p><u>www.nao.org.uk/report/a-framework-for-evaluating-the-implementation-of-private-finance-initiative-projects-3/</u></p> <p><i>Note: The report is published in two volumes</i></p>

(aa)	OGC Gateway Process Review 5: Operations review and benefits realisation
Promoter:	Office of Government Commerce, UK
Authors:	Office of Government Commerce, UK
Date:	2007
Nature of Ex Post Assessment	
Type	Best Practice guidance
Main purpose	A workbook as part of OGC Best Practice Guidance addressing OGC “Gateway Review 5: Operations review and benefits realisation”. This purpose of the staged review is to confirm that the benefits set out in the <i>ex-ante</i> Business Case are being/have been achieved and that the operational service (or facility) is running as expected. An annex provides an overview of the key issues associated with reviewing PPP projects.
Methodology	<p>The Review may also be used on a one-off basis, to check that a project has delivered its intended outputs.</p> <p>Survey based on the responses of 93 contract managers in the private sector, across a range of PFI services in the UK (during 2006)</p>
Report format	<p>Description of the Gateway review process expected to occur:</p> <ul style="list-style-type: none"> • at the start phase of the service contract • a mid-stage review • a final end-of-contract period review. <p>The document provides a detailed list of questions that might be asked and the evidences that should be sought covering:</p> <ul style="list-style-type: none"> • review of operating phase • business Case and benefits management • plans for ongoing improvements in value for money • plans for ongoing improvements in performance and innovation • review of organisational learning and maturity targets • readiness for the future – Plans for future service provision
Timing	Operations phase
Promoter-type	Central government agency
Link	<u>www.gov.uk/government/uploads/system/uploads/attachment_data/file/62071/Gateway 5 Workbook Word Template v 2.0.doc</u>

(bb) Highway public-Private Partnerships: More rigorous up-front analysis could better secure potential benefits and protect the public interest

Promoter: United States Government Accountability Office

Authors: United States Government Accountability Office

Date: 2008

Nature of Ex Post Assessment

Type Programme and policy review

Main purpose

- To assess the benefits, costs and trade-offs associated with tolled highway PPPs in the US
- To assess how public officials identified, evaluated and acted to protect the public interest in PPPs
- To assess the role of federal government in highway PPPs (procured by US States) and the potential need to change this

Methodology Structured performance audit comprising:

- desk-top review of contract documents, published guidance, academic, corporate and government reports
- forecast analysis of future charges and revenues based on available documents and projected demand
- semi-structured interviews with stakeholders and public officials at each level of government
- interviews with officials and private sector representatives in other jurisdictions (UK, Canada, Spain and Australia)
- site visits to various locations for interviews

Note: The study focused only on PPPs comprising 'hard' tolls, ie. it excluded those with shadow tolls or availability payment structures.

Report format Report to US Congress summarising the findings of the audit, the literature reviews and interviews, analysis of data and recommendations on improved practice and possible changes to State and federal policies.

Timing Operational phase

Promoter-type National Supreme Audit Institution

Link www.gao.gov/products/GAO-08-44

(cc)	Performance Audit of the Operational Stage of Long-Term Partnerships for the Private Sector Provision of Public Services
Promoter:	Academic paper published in Australian Accounting Review
Authors:	Linda ENGLISH, Jane BROADBENT, James GUTHRIE and Richard C LAUGHLIN
Date:	2010
Nature of Ex Post Assessment	
Type	Thematic review
Main purpose	<ul style="list-style-type: none"> · To investigate the challenges associated with designing a system to evaluate the mature operating phase of long-term partnerships with the private sector. · Investigate the application/meaning of assessing economy, efficiency and effectiveness in performance auditing of mature long-term partnerships for the private sector provision of public services.
Methodology	Desk-top study of published literature and semi-structured interviews with officials of the audit office of the State of Victoria, Australia.
Report format	Academic paper setting out various propositions, examination of evidences and practices and concluding arguments and recommendations for changes in practice.
Timing	Operational phase
Promoter-type	Research organisations (collaboration)
Source:	Australian Accounting Review, 2010, vol. 20, issue 1, pages 64-75

EUROPEAN PPP EXPERTISE CENTRE

Ex-post assessment of PPPs

and how to better
demonstrate outcomes

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European Investment Bank
98-100, boulevard Konrad Adenauer
L-2950 Luxembourg
☎ +352 4379-22000
☎ +352 4379-62000
www.eib.org – ✉ info@eib.org

EPEC Secretariat
☎ +352 4379-22022
✉ epec@eib.org
www.eib.org/epec