Lessons for Private Finance Initiative in the Netherlands

Learning from the English PFI public building practice Learning from the English PFI public building practice Learning from the English PFI public building practice Learning from the English PFI public building practice Learning from the English PFI public building practice

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Bovis Lend Lease
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Preface

This report forms the conclusion of my Master of Science thesis as part of the education programme at the faculty of Civil Engineering and Geosciences of the Delft University of Technology. The thesis has been executed at the department of Design and Construction at the section of Building Processes in co-operation with the company Bovis Lend Lease.

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Delft, September 2005
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Summary

Introduction

The Dutch government was at the end of the 1990s faced with huge essential investments, but public budgets were inadequate to realise these investments. The procurement route Private Finance Initiative (PFI), in which the private sector designs, builds, finances, maintains and operates (DBFM/O) public services over a long-term period (25-35 years), formed for the Dutch government an attractive alternative in order to decrease the demand on public budgets. The expectation of public authorities is that PFI is also an opportunity to work more cost effectively and to improve the quality of public service delivery (better “value for money”) in comparison with the traditional project approach.

In achieving more value for money, the characteristics of PFI as “manifestation” of public-private partnership (PPP) play an important role. Examples are the extensive integration of building process stages in the PFI contract and the long-term performance responsibility (delivering the required output) of the private consortium towards the Employer, while having capital at risk. The private sector is moreover perceived to have a primacy in project management skills, creative design capabilities and risk management expertise compared to the public sector.

The PFI concept is in the Netherlands a relatively new phenomenon. The interest for the concept in the Netherlands is fed by overall positive experiences of the British government with the procedure. PFI is in the Netherlands usually referred to as the “concession” or “DBFM/O” model or as “PPP”. Since the mid 1990s, both public and private parties in England have gained substantial experience in working with the model. The Dutch governments policy regarding PFI has up to date taken shape in three transport-infrastructure projects, one utility and one public building project. The government is satisfied with the results of the tender processes and it wants to encourage the application of PFI; not only in the transport infrastructure and utility sectors, but also in the public building sector (ministry buildings, schools, hospitals). The Dutch construction industry is still primarily based on traditional, input-based forms of procurement and the industry generally has an aversion for change. Dutch private parties do have, however, interest in participating in PFI projects, because this new concept could create profitable opportunities and moreover, through participation in PFI projects, an important strategic objective of continuity can be fulfilled.

A primary characteristic of PFI is that it is output oriented. This means that the emphasis is laid on the service to be delivered by the private sector rather than the product. Due to the novelty of PFI in the Dutch construction industry in general and in the public building sector in particular and public parties lack, in comparison with their English colleagues, experience in working with the output-oriented character of PFI. Following from this, the objective of the thesis is stated as:

To contribute to the learning process that Dutch private and public parties have to go through concerning output based working in PFI public building projects.

The following research question can be formulated from the objective:

What can Dutch private and public parties that are going to participate in future PFI projects, learn from the English PFI public building practice with regard to output based working?

Case projects

Dutch and English literature on PFI has been studied to serve this research question. Subsequently three PFI public building projects in England have been visited and interviews have been conducted
at these projects with representatives of involved parties. For reflection purposes also interviews have been conducted with participants in the two Dutch public building projects and consultants.

**English projects:**
- Government Offices Great George Street (GOGGS) project (London);
  This project was carried out in two phases. Total capital costs (incl. VAT): €168 million (phase 1), €222 million (phase 2), date financial contract close: May 2000 (phase 1), Jan 2003 (phase 2), contract term: 35 years.
- Lincolnshire Grouped Schools project (County of Lincolnshire);
  This project comprised of 7 subprojects: 3 new primary schools (mainstream) and 1 new primary school and 3 new secondary schools for children with difficulties (specialist). Total capital costs (incl. VAT): €21 million, date financial contract close: September 2001, contract term: 30 years.
- The Worcestershire Royal Hospital project (County of Worcestershire);

**Dutch projects:**
- Montaigne Lyceum project (The Hague);
  This project comprises the new build of a secondary school. Total contract value (NPV, excl. VAT): €17 million, date financial contract closure: December 2004, contract term: 30 years.
- Ministry of Finance project (The Hague);

See part 3 for a brief description of the case projects.

Three contextual differences between England and the Netherlands effecting the construction industry in general and building projects in particular are of interest for the application of the English PFI model in the Netherlands. The differences relate to:
- legal system (cultural difference);
- consultation and strive for consensus (cultural difference);
- fraud in the Dutch construction industry.

The contextual differences are worked out in the report (see part 4).

**Conclusions and recommendations**

Four particular aspects that need special consideration resulted from the interviews conducted at the case projects and are worked out in detail part 4 of the report. These aspects relate to the output-oriented character of PFI and may function as lessons for Dutch parties that participate or are planning to participate in future PFI public building projects. Important to note in this respect is that some of these aspects appeared to be lessons for English parties themselves as well. The following conclusions result from the analysis of the aspects of special consideration.

**User involvement**

A distinction is made between the planning stage and procurement procedure of a PFI project:
- **Planning stage**
  The involvement of users (public sector employees that provide services as well as “consumers” of these services) is very important in writing the output specification. There is a danger that authorities may limitely involve users in drafting the specification as a result of inexperience and a tight time scale. Users may furthermore be perceived as troublesome in the delivery of the output specification. If well organised and managed, the user involvement does not have to lengthen the planning stage (development of output specification). In both Dutch projects users in the meaning of employees have played a significant role in the development of the output spec.
- **Procurement procedure**
  The user – architect relationship is very important during the procurement procedure; it is essential that this relationship works well. Users therefore have to communicate several times with
each of the consortia’s architects separately in this stage, because the tendering consortia all are in competition. This can result in a tiresome and inefficient process for the users, especially in case the project concerns an organisation with a large variety of users. The Employer could in my opinion address this issue by employing an architect as “liaison officer” between the users and consortium’s architects. It must be noted, however, that ultimately there is no substitute for direct contact between the users and the architects. In both Dutch PFI building projects several meetings were organised between the users and consortium’s architects during the tender stage.

**Design work**

PFI changes the traditional contractual position of the architect (or design team) in a project. In PFI, the architect works for the private consortium (or SPV) and not for the Employer as in traditional procurement. The time-period (before the stage of Best and Final Offer, BaFO) in England to prepare a design in accordance with output specification typically comprises 4 months, of which for effective design work 2 to 3 months remain. The progress of the design can normally be classified as (somewhat less than) preliminary design. The effective design period, in which the main design parameters are fixed, is short compared to the traditional situation. This may not be troublesome for tendering consortia, but the negative consequence of this relatively short period in PFI may go at the expense of quality. It could therefore in my opinion be beneficial for the Employer if design work has been executed already before the tender stage.

This initial design work could be executed by:

- **Tendering consortia**
  The Employer could request tendering consortia for spatial, technical and/or architectural design solutions (conceptual nature). This design work can also serve as a means for the Employer to get an impression of how the output specification is interpreted. A major disadvantage is that the design work impacts on the duration of the procurement procedure and on the tender costs (consortia have to invest extra time and money). At the Montaigne Lyceum project, the procuring authority requested the consortia in the consultation stage (2 months) for a concept design.

- **Employer**
  There are two distinct levels in which the Employer’s design work can be shaped:
  - **Visualising cultural elements**: to make understandable the desired requirements regarding the quality of cultural elements of the project (photographs). Cultural elements include the interior and exterior atmosphere and charisma of a building and its relation with the environment. This strategy was used in developing the output specification for the project of the Ministry of Finance.
  - **Exemplar designs**: conceptual functional, spatial and/or technical solutions. These solutions are an appropriate instrument to make clear what outcome the Employer is aiming at and can hence be used as a “springboard” for consortia in putting their tender-offers together. They can start their design work from a certain level, instead of from scratch (see figure). Exemplar designs should not be imposed on the consortia (design risk is transferred to the SPV). In both Dutch PFI public building projects the Employers did not execute such exemplar design work.

![Diagram showing design stages](image)

**Design stage**

- Preliminary design
- Concept design
- Initial design work (executed by Employer)
- Design work by short-listed consortia in tender stage (before BaFO)

**Visualisation of the advantage of preparatory design work in the tender stage**

Initial design work executed by the Employer (especially the exemplar design work) is in my opinion preferred above the initial design work executed by the tendering consortia.
The Employer should employ an architect to execute the initial design work. This architect also can fulfill a role as liaison-officer to guide the consortia’s architects during the tender stage and to develop a strong relationship with the users (as has been mentioned). The Dutch Chief Government Architect’s Office (Dutch: Atelier Rijksbouwmeester) is in my opinion an ideal party to take responsibility for the execution of exemplar design work and to function as liaison-officer in PFI government building projects.

Changes in building design and FM services

PFI projects inevitably change after the contract is signed. The Employer should therefore require in the output specification provisions for flexibility in building design. This is necessary to streamline the implementation of changes (variations) during the operational stage. Both output specifications of the two Dutch PFI public building projects had taken account of flexibility.

The public Employer and Contractors could propose changes:

- Changes proposed by the Employer

  Finance in PFI tends to regulate the level of change an Employer desires to put through. Project financiers are concerned that the changes will not have an adverse impact on the project’s risk profile and thus on the ability of the SPV to fulfil its repayment obligations.

  The clause in a PFI contract describing the variation procedure can be quite comprehensive and, consequently, may take a long time to work through. In order to facilitate the change procedure concerning minor changes to the building, a “small works” change procedure should be incorporated as an alternative to the formal variation procedure.

The Employer needs to have the following arrangements in place in the contract to be reassured that a Contractor prices proposed changes in building design and FM services fairly:

  - Transparency of information on which the Contractor’s quotation is based (open-book);
  - Benchmarking the costs of implementing a change against the market costs, so that can be proved that the costs are in conformity with the market.
  - Unit rates (indexed) of for example labour and materials;

Regarding the costs of changes, two aspects have to be considered:

  - Informed Employer: the Employer needs to be an “informed” Employer to set out the desired change in sufficient detail so that proper management is possible of the costs of change. This means that the Employer exactly has to know what his users require to be changed.

  - Competitive tendering: in case the change encompasses a discrete package of work and its expected costs exceed a certain pre-agreed threshold, the Employer could require the SPV to organise a tender. In this way, the Employer receives alternative quotations formed in competition for the new FM service or works to be executed.

The contracts of both Dutch building projects contain a comprehensive change mechanism in which a special variation procedure is incorporated for small changes to the building on the Employer’s proposal. Also the arrangements of open-book and benchmarking are in place in both projects. At the Montaigne Lycée it is not contractually laid down that the Employer can require the SPV to organise a tender for a proposed change encompassing a discrete package of work.

- Changes proposed by the Contractor

The Contractor should be encouraged to find ways of delivering a service more economically. A non-comprehensive change procedure for Contractor’s changes should therefore be incorporated into the PFI contract for changes that only concern the way in which a particular service is delivered (methodology) and do not effect the actual performance standard as specified in the output specification. In both Dutch PFI public building projects a distinction is made between change procedures for radical changes concerning the service performance standard and change procedures for small or minor changes that do not impact on the quality of services delivered.
In large-scale projects in which a range of sub-Contractors is employed, the hierarchical organisational structure can make it cumbersome for Contractors at the bottom of the structure to change the way in which they deliver services. To address this problem, communication lines between the Employer and sub-Contractors have to be shortened.

Performance incentives

The SPV receives over the contract term periodically payments from the Employer with which it has to cover its expenses and to make a profit. The Employer is able to make deductions from these payments in case of poor performance by the SPV. The primary purpose of the deduction system is to incentivise the SPV to deliver the building and FM services timely and in conformity with the performance standards. The application of deductions may have, however, two negative side effects:

- Contractors may not be sufficiently stimulated to improve the quality of their service delivery during the operational stage, because they are too much focused on avoiding penalties;
- Deductions stimulate a defensive type of behaviour among FM Contractors, primarily in large-scale projects where much work is put out to contract to a range of sub-Contractors.

It could therefore be helpful if the payment mechanism also has a "positive side": a bonus system. This means that performance that is better than required in the output specification is financially rewarded. By introducing this, Contractors have an incentive to perform better each time and are more willing to raise their service levels over the contract term. The measurement of the level of bonuses can take place qualitatively (satisfaction survey), quantitatively (performance monitoring) or a combination of both, depending on the type of project.

At the Montaigne Lyceum project no bonus system as performance incentive is incorporated in the payment mechanism due to budgetary restrictions. The Employer at the project of the renovation of the Ministry of Finance intends to incorporate an annual bonus in the contract with the SPV.
1 Introduction

The invention of the steam engine in England in the 18th century signified the start of the Industrial Revolution. Over half a century later the industrialisation set foot in continental Europe and the Netherlands followed with hesitation. The revolution gave an enormous impulse to the development from an economy based on manual labour to machine manufacturing. Despite the enormous differences in scale of impact, a hypothetical correlation can be made between the Industrial Revolution and the in England introduced procurement procedure Private Finance Initiative (PFI). The PFI model has an impact on the way parties are used to work in civil engineering projects as the revolution has had an impact on society in general. Moreover, similarly to the industrialisation process, PFI spread from its introduction in 1992 from England to countries of continental Europe.

Research in the PFI procurement procedure actually started in the Netherlands from 1999 with the establishment of a knowledge centre. The PFI model, in which the private sector designs, builds, finances, maintains and/or operates (DBFM/O) public services over a long-term period, formed for the Dutch government an attractive response in order to decrease the demand on public budgets. The expectation of Dutch public authorities is furthermore that PFI is an opportunity to work more cost effective and to improve the overall quality of public services in comparison to the traditional project approach. The attention for PFI in the Netherlands is fed by overall positive experiences of the British government with the procedure. Since the mid 1990s, both public and private parties in England have gained much experience in working with the PFI model. The experience of the Dutch parties with working with PFI however is up to date restricted to three transport infrastructure and one utility project. In the public building sector two pilot projects are recently initiated and more projects are expected.

A primary characteristic of PFI is that it is output oriented. This means that the emphasis is laid on the service to be delivered by the private sector rather than the product. Due to the novelty of the PFI concept in the Dutch construction industry in general and in the public building sector in particular, both private and public parties lack, in comparison with their English colleagues, experience in working with the output-oriented character of PFI. The objective of this thesis is therefore to contribute to the learning process that Dutch private and public parties have to go through concerning output based working in PFI public building projects.

This report is structured in 5 parts. In part 1 (Research) the problem analysis is described, including the problem definition, objective, research question and methodology. Part 2 (Theory) forms the introduction to the PFI procurement procedure. Important aspects of the model are discussed to obtain good understanding of the concept, such as the benefits, risks, the PFI process, financial issues and the payment mechanism, legal aspects of a PFI contract that do need special consideration in Dutch law and the output specification. Part 3 (Description of case projects) briefly describes the 3 English and 2 Dutch PFI public building projects that encompass the case study research to serve the objective of the thesis. In part 4 (Analysis) contextual differences between England and the Netherlands and 4 aspects of special consideration regarding output based working in
PFI public building projects are explored. These aspects follow from the case study research. In conclusion, part 5 sets out the conclusions and recommendations of the thesis.
Part 1: Research
2 Problem analysis

After an introduction into the emergence of the PFI concept in the Netherlands, the problem definition, objective and central research question of the MSc thesis will be described. On the basis of these descriptions the thesis is defined to a specific research subject within the PFI procurement procedure. The research methodology will be described in conclusion of this chapter.

2.1 Introduction

At the end of the 1990s, the Dutch government was on the one hand faced with huge essential public investments in order to decrease road congestion, to improve the quality of public transport and to stimulate economic activities. On the other hand, however, public budgets were inadequate to realise these plans and the mega-projects Betuwe- Line and High Speed Line already claimed heavily on the limited public funds.

The form of public-private partnership (PPP) in which the private sector designs, builds, finances, maintains and/ or operates (DBFM/O) public services over a long-term period (the English Private Finance Initiative (PFI)), formed for the Dutch government an attractive response to the budgetary issues. Generally speaking, PFI projects can be divided into three sectors, which are the transport-infrastructure, utilities and public building sector (see below). The sector of area development in which PPP projects might be initiated is excluded, because in this sector the PFI concept is not being applied. The alliance model is used for PPP projects in this sector, both on a local (municipalities) and national (government) level.

PFI projects can be divided into the following three sectors:

1. Transport-infrastructure
   (For example rail, road, tunnels, bridges)

2. Utilities
   (For example power generation and waste water treatment plants)

3. Public buildings
   (For example ministry buildings, hospitals, schools, courts, prisons)

Through PFI, new public services could be realised without the need for the public sector to carry the initial financial burden for them. Although the private sector arranges the financing in PFI, the public sector eventually bears the total costs of the delivery of the service (including the financing costs). The Dutch government believed and still believes to date that by this way of working, opportunities can be created for working more efficient and to improve the overall quality of the delivery of public services (better value
for money) in comparison to the traditional project approach. This corresponds with the policy objectives concerning the delivery of public services that are described in the 1998 coalition agreement at the start of the second Kok administration.

In achieving better value for money in the delivery of public services, characteristics of the PFI model as the extensive integration of building process stages and the long-term performance responsibility of the private consortium towards the Employer, while having own capital at risk, play an important role. Moreover, the private sector is generally perceived to have a primacy in project management skills, innovative design capabilities and risk management expertise compared to the public sector.

The PFI procurement procedure is a new phenomenon in the Netherlands, where it is usually referred to as the "concession" or "DBFM/O" model or as "PPP". The government has chosen to introduce this model gradually, rather than with a "big bang". The strategy, public and private parties have the opportunity to build-up knowledge and experience, which can form a basis for successful participation in PFI projects. The government's policy regarding PFI took shape in the following pilot projects:

- High Speed Line (HSL) South Infrastructure (125 km) (Contract close: December 2001);
- Road project A59 Rosmalen-Geffen (9 km) (Contract close: February 2003);
- Road project N31 Leeuwarden-Drachten (13 km) (Contract close: December 2003);
- Wastewater treatment plant (Contract close: December 2003);
- Montaigne Lyceum (Contract close: December 2004);

As the Dutch government is content with the overall results of the tender processes of these projects and because there is sufficient interest for participation in PFI projects within the (inter)national private sector, the government wants to broaden its scope by introducing PFI also in the public building sector. The attention for this sector is fed by overall positive experiences of the British government with PFI public building projects. Since the beginning of the 1990s, both public and private parties in England have gained much experience in working with the PFI concept.

The PPP Knowledge Centre of the Ministry of Finance assigned the school "Montaigne Lyceum" in The Hague as the first pilot project in the Dutch public building sector. In December 2004, the municipality of The Hague and the private consortium "TalentGroep" (consisting of Strukton, Imtech and ISS) have entered into a contract for the finance and delivery of the school for a period of 30 years. In August 2004, the tender process started for the renovation of the headquarters of the Ministry of Finance in The Hague. Furthermore, research was executed regarding the attractiveness of applying the PFI model for the delivery of new build and renovation works, maintenance and operation of the hospital "Groene Hart Ziekenhuis" in Gouda. The hospital board of directors decided in February 2005 not to make use of PFI.

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1 Meer Waarde door Samen Werken (1998), persbericht nr. 98/203, centrale directie voorlichting
2 Voorgangsrapportage PPS, van incidenteel naar structureel (2004), Kenniscenrum PPS
3 Voorgangsrapportage PPS (May 2002) & Public-private samenwerking bij huisvestingsprojecten. Wie durft? (June 2001), Kenniscenrum PPS
The intention of the Dutch government was however to have concluded more PFI contracts to date, thereby also in the public building sector. Although public-private partnership is accepted by now within governmental departments as a valuable instrument to execute projects, the application of PFI in practice is however limited, in other words too incidental. According to the progress review report (November 2004) of the PPP Knowledge Centre, the challenge for the coming years is to come to a structural application of public-private partnership in general and PFI in particular. In this way, the argument can be verified if PFI really leads to better value for money compared to the traditional procurement procedure. Furthermore, insight can be gained in obstacles that stand in the way for an effective utilization of PFI and knowledge within the public and private sector can be build up to facilitate further applications of this concept.

In September 2004, the paper “Cobouw” reported that the Dutch Government Buildings Agency (GBA) (Dutch: Rijksgebouwendienst, Rgd) had published a list of nine potential public building projects to be procured through PFI in the Netherlands. Examples of these projects are the renovation of the Statistics Agency building in Heerlen and of the headquarters of the Ministry of Agriculture, Nature and Food Quality in The Hague and the new build of a court house (Amsterdam). Currently, the GBA investigates the feasibility of involving private parties into the projects.

2.2 Problem Definition

In the traditional procurement procedure, the Employer provides the Contractor clear, unequivocal and complete tender specifications that specify in detail what needs to be constructed and what materials and products need to be used. Under PFI, however, the public Employer is concerned with the specification of the service it wants to receive. The requirements of the Employer are, therefore, set out in “output” terms in a so-called output specification. The output terms describe what the Employer wants to have as a result, as opposed to “input” terms that specify what needs to be constructed. So the emphasis is laid on the service to be delivered rather than the product. How the delivery of these services takes place is nevertheless a matter for the private sector to determine.

2.2.1 Output specification

The output specification forms the essential part of a PFI contract. On the basis of this specification a public authority will enter into a long-term agreement with a private consortium. So before a PFI contract is closed, the output specification requires much attention of both the public and private parties. It is important that it is formulated properly, because from the output specification the private consortium has to understand the results required by the Employer. The revenues of the private consortium depend on its performance or, in other words, on the quality of the services it delivers during the operational stage of the contract. In this respect, “quality” means that the services have to meet the in the output specification determined performance standards. In case of poor quality or lack of availability of a service, the Employer can apply a financial penalty.

As an example, a performance standard regarding utilities of a school building could prescribe that cold and hot drinking water has to be available at all times. In this respect, “hot” water is defined as water with a temperature between 40 and 50 degrees Celsius. It is up to the private consortium to determine how to fulfill this required performance standard during operation, using its experience and know-how. So in the example the consortium has to decide how much water is needed (quantity) and what kind of water system should be applied (quality). In case of a breakdown of the water system, the above-mentioned performance standard cannot be met. When the problems are not
solved within a predetermined time period, payment deductions can be made by the Employer.

2.2.2 Comparing England and the Netherlands
Since the mid 1990s, public and private parties in England have gained substantial experience in working with the PFI procurement procedure: by November 2003, a total of 617 projects across different sectors in the United Kingdom had been signed under PFI with a capital value of over £56 billion (€84 billion).\(^4\) They profit from “best practices” and standardisation in the procurement process and more specifically stated, they have obtained experience in working with output in PFI projects.

In contrast to England, Dutch private and public parties have little or no experience in working with the output-based PFI concept. The underlying causes are that the Dutch construction industry is still primarily based on traditional, input-based forms of procurement and the construction industry in general has an aversion for change in project approach. However, in the 1980s the concept of thinking in “output” entered the Dutch building sector with the application of the performance concept in developing the tender specification (Dutch: bestek) for the house-building industry. The Dutch Government Buildings Agency (GBA) developed furthermore the performance contract model (Dutch: prestatie contract model) in the early 1990s. The contract model was initiated on financial considerations in a period of stringent public budgets. However, from the mid 1990s, when the pressure on public funds decreased, it did not have much potential for application anymore. Today, the performance contract model is not used anymore. The performance specification that was developed for this model, however, is still used by the GBA in primarily traditionally procured accommodation projects.\(^5\)

2.2.3 Interest of Dutch private parties in PFI
As can be derived from the introduction, the practical application of PFI in the Dutch construction industry in general and in the public building sector in particular to date is incidental and develops at a slow pace. These days, however, the Dutch government promotes and stimulates the concept in certain sectors by trying to create a stream or pipeline of pilot projects to obtain an impulse for a structural application of the PFI concept. Dutch private parties have interest in participating in PFI projects, because this new form of procurement procedure may create long-term profitable opportunities and moreover, through participation in PFI contracts, an important strategic objective of continuity can be fulfilled. The interest of the market has already manifested in the large number of registrations for the first pilot projects initiated by the government.

However, due to the fact that concrete projects come about too little in the Netherlands, private parties and public authorities do not have the opportunity to gain knowledge, expertise and experience in working with the output-based PFI procurement procedure. Projects are necessary to stimulate the learning process.

\(^4\) PFI in the UK: Progress and Performance (2003), International Financial Services London (IFSL)

\(^5\) Interview with Mr. R.K. Onel MSc, senior consulting engineer at the Dutch Government Building Agency (GBA)
The problem definition (in other words: what is undesirable in the present situation) is stated as:

Due to the novelty of the PFI concept in the Dutch construction industry in general and in the public building sector in particular, both private and public parties lack, in comparison with their English colleagues, experience in working with the output-oriented character of PFI.

2.3 Objective
Following from the problem definition, the objective of the thesis is stated as:

To contribute to the learning process that Dutch private and public parties have to go through concerning output based working in PFI public building projects.

2.4 Research question
From the problem definition and objective, the following research question can be formulated. This question will be answered in this report.

What can Dutch private and public parties that are going to participate in future PFI projects, learn from the English PFI public building practice with regard to output based working?

2.5 Research methodology
To serve the objective and research question of this thesis, first a literature study was executed to gain good understanding of the various aspects of the PFI procurement procedure, the PFI development in England and the Netherlands and the concept of thinking in "output". The results of this study are brought together in part 2 (Theory) of this report and in appendix A (Assessment of PFI performance in the UK).

Subsequent to the literature study, case study research was executed comprising three PFI public building projects in England in which Bovis Lend Lease participates. These projects are:

- Government Offices Great George Street (GOGGS) project (London);
- Lincolnshire Grouped Schools project (County of Lincolnshire);
- The Worcestershire Royal Hospital project (County of Worcestershire).

See part 3 of this report for a brief description of these 3 projects. Interviews have been conducted at these projects with representatives of all involved parties (Employer, private consortium, users). See appendix D for the list of the interviewed persons. The interviews were structured according to a questionnaire that was send to all interviewed persons foregoing the visits. The questions of the questionnaire were grouped under the following 6 subjects:

- Preparation of the PFI contract;
- Formulation of the output specification;
- Contents of the output specification;
- Monitoring of performance standards;
- Flexibility in the output specification;
- Experiences with working with the PFI contract.

In the processing of the information gained from the interviews, a number of interesting aspects resulted relating to the output-oriented character of PFI that may function as lessons for Dutch private and public parties that participate or are planning to participate in future PFI public building projects. Some of these aspects also appeared to be lessons for English parties themselves as well. For reflection purposes also interviews have been conducted with participants in the first two Dutch PFI public building projects:

- Montaigne Lyceum project (The Hague);
- Ministry of Finance project (The Hague).

The Montaigne Lyceum project reached contract closure in December 2004, the contract closure of the Ministry of Finance project is expected in spring 2006. See also part 3 of this report for a brief description of these projects.

In part 4 of this report the aspects of special consideration are worked out in detail. In the analysis of the information gained from the projects in the case study research, account is taken of the differences between the English and Dutch legal system. Not all aspects of a PFI contract are regulated and dealt with under Dutch law in the same way as under English law.
Part 2: Theory
3 Forms of procurement in civil engineering

In civil engineering projects, three stereotype forms of procurement can be distinguished between the public “Employer” and “Contractor”: traditional, innovative and public-private. The basis of this division is formed by a sliding scale of on the one hand the degree of transfer of risks, responsibilities, authorities, tasks, obligations from the Employer to the Contractor and on the other hand by the extent of integration of the different stages of the building process. See figure 3.1 for the stereotype forms of procurement in between the two extremes: the Employer carries out all the work himself and privatisation. Figure 3.2 on the next page gives a visualisation of the six main stages of the building process.

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**Figure 3.1: Stereotype forms of procurement in civil engineering projects between the public Employer and Contractor**

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**Figure 3.2: Stages of the building process**

In the next three subsections, the stereotype forms of procurement will be set out in brief for understanding.

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3.1 Traditional procurement

In traditional procurement (Bid-Build model), each component of a project is offered to the market under a separate contract. This form is characterized by a strict separation between the different stages of the building process and the involvement of the Employer in the total process. This form has dominated the Dutch construction industry for many years and is still the most-used option in building projects.

The design team (existing of an architect and other consultants) of the Employer provides for the design and tender documents. In the Netherlands these documents encompass the drawings and specification (Dutch: bestek en tekeningen). In the tender process the Employer contracts a Contractor to execute the construction works in accordance with the tender documents. There is no contractual relationship between the design team and Contractor. See figure 3.3 for a visualisation of the contractual structure in traditional procurement. After completion of the construction works, the Employer contracts another or the same Contractor to carry out maintenance and/or repairs during the operational period of the asset.

![Diagram](image)

**Figure 3.3: Contractual structure traditional procurement**

In this model the allocation of responsibilities are clearly defined: the responsibility for the design lies with the Employer and the responsibility for the construction works with the Contractor. It must be noted, however, that in the Netherlands the Contractor do has responsibility regarding the design. According to the Dutch conditions “Uniforme Administratieve Voorwaarden 1989” (UAV 1989), the Contractor has the obligation to warn the Employer in case the design contains faults that the Contractor in fairness and reasonableness can notice.

The Employer supervises the Contractor during construction, so he is actively involved in the realization of the structure. Furthermore, the Employer takes care of the financing package of the project. The strict separation between the different stages causes a slowdown effect on the building process and the Contractor's expertise and creative strengths can only be utilized in only one element of the project. Furthermore, no “tuning” between the different stages can take place resulting in less overall construction quality and in a high chance of additional works. Other implications of separate contracts are that the Employer assumes the risk of achieving the right linkage between the individual components. For example, if a design error means that the Contractor is suddenly faced with cost overruns, the Contractor will pass on these extra costs to the Employer that supplied the “defective” design.
3.2 Innovative procurement

In an innovative form of procurement, the design and construction stages are integrated. A higher degree of transfer of risks (and responsibilities, authorities, tasks, obligations) from the Employer to the Contractor takes place than the traditional procurement form. Eventually, the final distribution of risk depends on the contractual agreement. Design-Build and Turnkey are examples of innovative procurement contracts.

In this type of procurement, the Contractor both designs and provides for the construction works (forward integration). So the Employer tenders out the stages of design and construction into one package. Through the broader scope, the Contractor is able to introduce his specific construction and costs knowledge and experience into the design process. See figure 3.4 for a visualisation of the contractual structure in innovative procurement. The Employer provides for a list of requirements (Dutch: Programma van Eisen) and in Design-Build the contract is entered into on the basis of a concept design. With this type of procurement, there is no traditional form of supervision. The Contractor shall however allow the Employer a general authorisation for inspection to make sure the works are executed in compliance with the contract.

![Diagram](image)

Figure 3.4: Contractual structure innovative procurement

The emphasise on realisability and efficient methods of construction in the design process can save construction time and costs. Moreover, in this form of collaboration time savings can be achieved by overlapping the final stages of design with the early stages of construction. In this situation, the disciplines in the design team (architect, structural and MEP engineers) obviously do not have to have finished all of their design and calculation work. The foundation works can start, for example, while the design of the façade of the building is still in progress.

A Turnkey contract is a special form of the DB contract, in which the Employer invites Contractors to make a tender offer on the basis of exclusively a list of requirements supplied by the Employer. The Turnkey contract is based on lump-sum (fixed price) reimbursement. In contrast to the DB contract, the Employer is in Turnkey projects assumed to have no influence/ supervision at all between contract signature and delivery of the works. As a result, Turnkey is primarily used for standard building projects.
3.3 Public-private partnership

The term public-private partnership (PPP) is generally used to covers a wide range of different types of relationships between the public and private sector, such as subsidy programmes, private sector ownership into state-owned businesses (equity) and utilizing private funding in public sector projects.

There does not exist a clear definition that describes the form of collaboration. In the literature various definitions of PPP can be found. Examples are:

"Any arrangement between a government and the private sector in which partially or traditionally public activities are performed by the private sector." (Savas, E.S.)

"A form of collaboration in which the government and the private sector, each retaining its own identity and responsibilities, join forces to carry out a project on the basis of a predetermined sharing of tasks and risks." (PPP Knowledge Centre, Ministry of Finance)

On the basis of a literature study, Spiering and Dewulf have made an extensive inventory of all the elements of PPP that occur in definitions. These elements are:

- Collaboration between public and private parties;
- On the basis of a joint scope and common objectives;
- In all the stages of a project;
- For which separate entity (joint legal body) is established;
- Focussed on the creation of surplus value;
- In which the possibilities for balancing (between profitable and unprofitable parts of the project);
- And the generation of cash flows;
- Form the basis of a financial risk allocation;
- And for the division of revenues;
- This all in a joint responsibility;
- On the basis of equivalence;
- And with retaining the own identity.

In PPP-projects, however, only seldom are all of these elements encountered at the same time.

In figure 3.1, the Private Finance Initiative (PFI) concept is taken as type of public-private partnership closest to privatisation. The reason for this is that this model has the highest possible degree of transfer of risks, responsibilities, authority, tasks, obligations from the public Employer to the Contractor (often a consortium of private parties) and the most extensive integration of stages of the building process of the defined three stereotype forms of procurement. An extensive exploration of the PFI model is given in the next chapter. The appropriateness of indicating PFI as manifestation of public-private partnership can be questioned, although there does not exist a clear definition of this collaboration form. See section 4.3 for a discussion of this issue.

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7 Privatisatie en de Public-Private Partnerships (2000), Savas, E.S.
8 Publiek-private samenwerking bij transportinfrastructuur. Wenkend of wijkend perspectief? (2002), Joop Koppenjan and Hans van Ham
4 Private Finance Initiative

This chapter discusses the Private Finance Initiative (PFI) procurement procedure. Section 1 forms a general introduction to PFI. The start and development of the PFI model in the UK and the Netherlands are discussed in section 2 and 3 respectively, followed by an explanation of the types of PFI projects in the fourth section. Section 5 gives a typical PFI contractual structure and section 6 explores the interface agreement. In conclusion, section 7 discusses the primary barriers to entry into the PFI market for Contractors.

4.1 What is PFI?

The Private Finance Initiative (PFI) was introduced as a procurement procedure in England in 1992 by the government of Prime Minister John Major. PFI aims to increase the involvement of the private sector in the provision of public services, such as health care, education, transport-infrastructure and utilities. This report focuses on PFI projects in the public building sector.

Historically, the public sector in England has procured assets from which it has based its services. The selection of a procurement strategy was therefore driven by the need to acquire a particular asset, such as a building. From the 1990s, however, political thinking in England placed greater emphasis on the service rather than the asset. The following quotations support this matter:

"The only reason why governments [...] occupy buildings [...] is to help them deliver services or achieve policy objectives." 9

"What counts is the quality of the service provided from those buildings." 10

The philosophy of PFI is not the acquisition of a particular asset, but the procurement of a service.

The private sector has always been involved in the design, construction, maintenance and operation of public services. However, in PFI, a public Employer enables a private party to design, build, finance, maintain and/ or operate (DBFM/O) a public service, based on output specifications decided by the Employer. However, the responsibility for the core service provision, such as teaching and clinical services, continues to be retained by the public sector. In PFI public building projects, the private sector is usually organized in a consortium often consisting of a Design & Build Contractor and facilities management (FM) Contractors. They attract investors to secure the financing part of the contract. See section 4.5 for a typical contractual structure undertaken in PFI.

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10 Private Finance Quarterly, autumn (1996), M. Jack
Depending on the type of PFI project, the private consortium receives during the operational period of the contract so-called unitary charge payments from the public Employer. These are periodical payments to the consortium, for both the availability of the asset and the hard/soft FM services provided along with it. Depending on the extent of availability and the quality level of the FM services, deductions may be made from these payments. However, in financially free-standing PFI projects, consumers pay directly for the service offered (tolls). With the revenues collected the consortium is able to repay the capital borrowed, to exploit and maintain the facility and to make a profit.

Although containing elements of privatisation, PFI differs from this concept. Privatisation involves placing the full ownership and operation of a whole business in the private sector. In PFI the public sector still retains a substantial role as Employer throughout the life of a project, being for example responsible for core service provision, such as educational and clinical services in schools and hospitals respectively. The public Employer is furthermore the ultimate owner of the asset once the contract has expired.

The “initiative” for a PFI project does not necessarily have to come from the public sector. A private consortium could possibly also approach a public authority with a proposal for a particular project (so-called speculative tendering) that the consortium considers commercially viable and with which the public sector has difficulty to find funds from the public sector budget. In the great majority of English PFI projects, the initiative comes from a public authority after it has identified certain service shortcomings.

4.2 PFI in the UK

4.2.1 Political context

During the 1980s, under the leadership of the Conservative Prime Minister Margaret Thatcher (1979-1989), the United Kingdom has been a leading pioneer in a global wave of privatisation. In this period, many state-owned and operated organisations, such as British Telecom, British Airways and British Petroleum, were sold off to the private sector. This policy had the objective to “free-up” the British economy, allowing market forces to reduce public sector inefficiencies and cost overruns and to improve the quality of public services. The support for privatisation continued under Thatcher’s Conservative successor John Major.

In the early 1990s, however, the emphasis of the Conservative Government policy shifted from privatisation to a strategy of using private sector organisations in delivering and financing public services. This strategy is seen “as an element of the New Public Management in Britain”¹¹, a movement that attempted to reform or “marketize” public services through the introduction of managerial skills, entrepreneurship and expertise from the private sector.

The drive for this shift to more private sector involvement in the provision of public services can be related to two important issues.¹²

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¹¹ Public-Private Partnerships; Theory and practise in international perspective (2000), Stephen P. Osborne
A. Pressure on the public sector budget

Firstly, the pressure on the public sector budget can be regarded as an important issue. In the United Kingdom, but also in other countries, existing public services suffered from a maintenance backlog as a result of the cumulative effect of under-investment on public assets. As can be derived from figure 4.1, "capital" expenditure (public sector net investment) tended to have less political priority in the UK compared to "current" expenditure in the public sector from the 1970s.\(^{13}\) Reason for this is that capital expenditure does not have the immediate political and social impact that follows from not fulfilling current spending commitments. In contrast to current expenditure, capital expenditure has a lasting, long-term impact on the economy.

![Figure 4.1: Public expenditures with trend line, 1968-69 to 2000-01 (2001-01 price levels)](image)

Alongside this pressure on the public sector budget to renovate and maintain existing services, demands for new transport-infrastructure, utilities and other services were growing. There was furthermore particular emphasis to keep public expenditures under control, also with regard to satisfying the convergence criteria, laid out in the Maastricht Treaty (1992). These criteria needed to be met by the UK, as a member of the European Union, in order to be eligible to join the economic and monetary union and to introduce the European currency (Euro). These issues together resulted in a pressure on public expenditures. However, by making use of private funds for financing public services, the

\(^{13}\) The Stationery Office, Public Expenditure Statistical Analyses 2001-2002

\(^{14}\) Clarification: Public (and also private) expenditure can be categorized into either "current expenditure" or "capital expenditure". Current expenditure is recurring spending or, in other words, spending on items that are consumed and only last a limited period of time. These items are used up in the process of providing a service. In the case of the public sector, examples are wages and expenditure on consumables such as stationary and drugs for the health service. By contrast, capital expenditure is spending on assets, items that will last and will be used time and time again in the provision of a service. Examples are the hospital building, transport-infrastructure and computer equipment and network.
public sector could reduce the large initial capital expenditures to realise public services and covert these into operating expenditures spread over a long-term timescale.

B. Improvements of cost-effectiveness and quality
As a second important issue can be appointed the development of the approach that more private sector involvement would result in improvements of cost-effectiveness in and quality of the delivery of public services, addressing historical shortcomings (delays, overspends) in public sector procurement management.

Formal introduction
The Private Finance Initiative (PFI) was formally introduced in 1992 by the then Chancellor of the Exchequer (Dutch: Minister van Financiën), Norman Lamont. The procurement procedure was a means “to increase the scope for private financing of capital projects”\(^\text{15}\). Furthermore:

\begin{quote}
“The perspective that drove the PFI was the same as that which had driven the overall Conservative public sector reform agenda since the early 1980s: that improvements in public sector performance would result from the public sector’s exposure to private sector methods and techniques, and to the disciplines of the market.”\(^\text{16}\)
\end{quote}

The following Labour Government embraced and strengthened the implementation of PFI. In contrast,

\begin{quote}
“throughout the 1980s and 1990s, the Labour Party in opposition had fiercely contested the Conservative view on the primacy of the private sector [over the public sector] and the policy agenda which had been taken forward to reform the public sector. However, since taking office in May 1997, the Labour Government, under the leadership of Tony Blair, has largely reversed the position of Labour in opposition, and pursued a public-policy portfolio that is premised on a strong allegiance to the concept of public-private partnership. In doing so, the Labour Government has taken forward an important element of the ‘new public management’ reform agenda, with its increasing focus on public service through the establishment of partnership relations between the agencies of government, both central and local, and the private sector […].”
\end{quote}

According to Falconer and Ross, the difference between the Conservative and Labour approach to PFI is that the Labour Government does not pursue PFI on ideological grounds:

\begin{quote}
“The real task for Labour was to move the PFI forward in substantive terms, particularly since what had begun for the Conservatives as an ideologically acceptable method of enhancing public sector capital spending […].”\(^\text{17}\)
\end{quote}

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\(^{15}\) Norman Lamont, House of Commons Hansard, November 1992 vol 213 c998

\(^{16}\) Public-Private Partnerships; Theory and practice in international perspective (2000), Stephen P. Osborne

\(^{17}\) Public-private partnership and the new public management in Britain (1998), P. Falconer and K. Ross
4.2.2 Overview of PFI development

By November 2003, a total of 617 projects had been signed under PFI with a capital value of over £56 billion (£84 billion). See figure 4.2 for a chart indicating the annual value of PFI deals (bars) and the annual number of deals (line) in the UK from 1992 to 2003.\(^{18}\)

While there were a few projects in the early 1990s (including a large contract of £4 billion for the Channel Tunnel Rail Link in 1996), most contracts have been signed since 1997.

As already had been mentioned, governmental investment in public services had been on a declining trend since the 1970s, resulting in falling standards in the quality of these services. According to among others the HM Treasury report “PFI: Meeting the Investment Challenge” and the “2004 Spending Review”, the government is “committed to reversing this historic under-investment”. So since 1997, the government has significantly increased public sector total investment. Because not all investment is suitable for PFI, this procedure accounts for a limited proportion (10 to 15 per cent), as is illustrated in figure 4.3.\(^{19}\) The majority of public investment is still carried out through the traditional form of procurement. The chart shows how total investment is set to rise to over £58 billion (£87 billion) by 2007-08.

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\(^{18}\) PFI in the UK: Progress an Performance (2003), International Financial Services London (IFSL)

\(^{19}\) 2004 Spending Review, HM Treasury
Total UK investment in public services includes: capital investments of the private sector in public services under PFI; recycled proceeds from asset sales which are re-invested in capital on top of the budgets already available to departments; depreciation, to reflect the ongoing capital investment in existing assets for repairs and maintenance; Public Sector Net Investment (PSNI), reflecting (traditional) capital spending on public services undertaken within departmental budgets.20

PFI contracts have been signed in over 20 different sectors, and by over a hundred different departments and local authorities. See table 4.1 and figure 4.4 on the next page for a chart with a breakdown of the total capital value total and number of PFI projects by government department.20

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of PFI projects</th>
<th>Capital value (million £)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>44</td>
<td>37,972</td>
<td>66.9</td>
</tr>
<tr>
<td>Defence</td>
<td>59</td>
<td>4,011</td>
<td>7.1</td>
</tr>
<tr>
<td>Health</td>
<td>152</td>
<td>3,596</td>
<td>6.3</td>
</tr>
<tr>
<td>Education</td>
<td>102</td>
<td>2,028</td>
<td>3.6</td>
</tr>
<tr>
<td>Home Office</td>
<td>52</td>
<td>1,976</td>
<td>3.5</td>
</tr>
<tr>
<td>Environment</td>
<td>14</td>
<td>1,000</td>
<td>1.8</td>
</tr>
<tr>
<td>Work &amp; Pension</td>
<td>7</td>
<td>961</td>
<td>1.7</td>
</tr>
<tr>
<td>Devolved Adm. :</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scotland</td>
<td>29</td>
<td>2,217</td>
<td>3.9</td>
</tr>
<tr>
<td>Wales</td>
<td>17</td>
<td>508</td>
<td>0.9</td>
</tr>
<tr>
<td>N. Ireland</td>
<td>29</td>
<td>395</td>
<td>0.7</td>
</tr>
<tr>
<td>Others</td>
<td>112</td>
<td>2,060</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>617</td>
<td>56,724</td>
<td>100.0</td>
</tr>
</tbody>
</table>

20 PFI in the UK: Progress an Performance (2003), International Financial Services London (IFSL)
Based on table 4.1 and the left pie of figure 4.4, the Department of Transport has accounted for over two thirds of the total capital value of PFI contracts, partly due to the projects 'Channel Tunnel Rail Link' and 'London Underground' (total capital value: £32 billion). However, even without these contracts, Transport would still have been the largest contributor taking almost a quarter of the total value, as can be seen from the right pie in figure 4.4.

The Department of Transport covers a variety of PFI projects, such as roads, bridges and (light) railways. Under PFI contracts of the Department of Defence fall for example communication (satellite) and intelligence systems and rapid deployment ferries. Furthermore, in Health PFI involved among others the investment in new or existing hospitals and most projects in Education have resulted in new or refurbished schools. In the Home Office, PFI contracts mainly concerned prisons, fire and police stations, while waste management and water treatment plants have been the main subjects of contracts in the department covering environmental issues.

4.3 PFI in the Netherlands

PFI is in the Netherlands named as the "concession" or "DBFM/O" (Design-Build-Finance-Maintain and/ or Operate) model and is, as well a in England, indicated as a primary manifestation of public-private partnership (PPP). It is therefore in the Netherlands often also simply referred to as "PPP".

In the Netherlands, the alliance model is indicated as the other primary manifestation of PPP. In this model the public and private parties form a legal entity (joint-venture) and work together on the basis of equality in order to reach a common result, while retaining their own identity and individual interests. The aim in the alliance model is to realise a so-called "joint product". An important feature of a joint product is that through the

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22 Nieuwe financiële instrumenten in publiek-private samenwerking (2002), Algemene Rekenkamer


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combination of functionalities and the choice of the scope of the project, a product is realized that could not have been achieved by the parties acting individually. Alliance projects primarily deal with area development.

The appropriateness of indicating PFI as primary manifestation of public-private partnership can be questioned, although there does not exist a clear definition of this collaboration form. The word “partnership” involves co-operation, i.e. “to work or act together” to between public and private sector parties. In contrast to the alliance model, where the public and private parties work together in a joint venture on the basis of equivalence, in PFI there is a clear matter of a value demander (public Employer) - value supplier (Contractor) relationship. For this reason it could be argued that only the alliance model should be regarded as primary manifestation of PPP.

4.3.1 Political context

In 1985 one of the first studies was published in the Netherlands in which the term “public-private partnership” was introduced. This study was executed at the University of Amsterdam and focused on the urban renewal and economical development in Baltimore, United States of America. This publication gave, as far as is known, for the first time much attention to the utilization of public-private partnership (PPP) and it initiated interest in the possibilities of PPP in both the Dutch public (policy makers) and private (Contractors, investors) sector.

The breakthrough of the interest in PPP was, however, marked in the coalition agreement of 1986 in which the second Lubbers administration embraced this collaboration form. In this agreement, the government expressed its preference for partnership between the public and private sector in among other things urban renewal. See the quotation:

"Nieuwe vormen worden opgezet van publieke en private samenwerking met de gemeentelijke overheid, het plaatselijke, c.q. regionale bedrijfsleven en indien nodig de Rijksoverheid, gericht op het opvoeren van het investeringsvolume ten behoeve van onder meer de stedelijke vernieuwing."
(Dutch)

Direct translation in English:
"New forms of public-private partnership are set up with the local authority, the local and regional business community and if necessary the central government, focussed on the increase of the investment volume for the purpose of among other things the urban renewal."

In this way, the government, suffering from limited budgets in a period of economic decline, could make use of private finance in order to increase the public investment volume to realize its high priority plans in the fields of urban development and transport-infrastructure.

First experiences with PPP

In response to the coalition agreement, the Ministry of Housing, Spatial Planning and Environment initiated over 20 urban renewal projects in major cities of the Netherlands, in which the public and private sector formed partnerships. At the end of the 1980s, two major investment projects were initiated by the Ministry of Transport and Public Works

24 Public-private partnerships. Theory and practice in international contracts (2000), S.P. Osborne
25 Publiek-private samenwerking mode of model? (1991), V.P. Kouwenhoven
20 Regeerakkoord (1986), Hoofdstuk 3
and became well-known examples of PPP in the Netherlands. These projects were the “Tunnel onder de Noord” and the “Wijkertunnel” road tunnels and were delivered in 1992 and 1996, respectively. The underlying objective of these projects was to improve the national transport-infrastructure without increasing the public budget deficit by making use of private funds in financing the projects.

The involved private consortia were responsible for the construction, maintenance and finance of the tunnels and in the contracts the consortia took on the construction risks. Risks related to the costs of maintenance of the tunnels were beared by the government, so it was to a high extent involved as supervisor during the construction works. An essential element in the contract to cover the consortia’s expenses was that the government’s payments were commensurate with the amount of vehicles making use of the tunnel (shadow toll). Evaluating the contracts, they eventually appeared to be of great financial benefit for the consortia. The National Court of Audit (Dutch: Algemene Rekenkamer) analysed the projects in the early 1990s and criticized the method of approach by the then minister of Transport and Public Works mainly with regard to the selection of the private financer and the risk transfer to the private sector. The Court of Audit reported that the private financing of the “Tunnel onder de Noord” and the “Wijkertunnel” projects were respectively 20% and 40% more expensive than in case of traditional public financing.27

According to Teisman28 these cost overruns had their basis in the fact that the government wanted to keep too much control on the contents of contracts and as result, the private consortia focused on the avoidance of risk. Moreover, at the time of closing the contracts, the financial institutions did not have much financial reserves, so the interest in participating in public service projects was limited. The government had as a result a far less good point of departure than the banks in the negotiations in order to realise the two tunnel projects.

The criticism of the National Court of Audit represented a major set back in the development of public-private partnership in the Netherlands; the form of collaboration was put under taboo.

Second wave of PPP

The taboo was being broken off at the start of the second Kok administration in 1998. From this time, PPP projects, especially regarding transport-infrastructure, obtained once again a high priority on the political agenda.

In this second wave of PPP, financial considerations again played an important role. At the end of the 1990s, the government was faced with huge essential investments in transport-infrastructure in order to decrease road congestion, to guarantee accessibility of expanding main ports, to improve the quality of public transport, etcetera. However, public budgets were inadequate to realise these plans and the mega-projects “Betuwelijn” and “High Speed Rail” already claimed heavily on the limited public funds.

27 Brief van de Algemene Rekenkamer aan de Voorzitter van de Tweede Kamer der Staten-Generaal, getiteld: Private financiering van de Wijkertunnel (2 juni 1993)
This time, however, the government approach to PPP was different then during the first wave of PPP projects. In comparison with this first approach, the government was more cautious and aimed for an approach based on research and in which interaction with the private sector would be an essential element. Höchner29 characterized this approach as typically Dutch: the “polder model” in the sector of transport-infrastructure. Moreover, the economic situation at that time was different from that in the 1980s, investors had more financial reserves and were interested in public projects to invest in and to form partnerships with the public sector.

As main co-ordinating governmental force, the Ministry of Finance initiated at the end of the 1990s an extensive research programme into the various features of public-private partnership, such as planning and decision-making procedures and financial arrangements. The main objective of this programme was to make the concept of PPP for policy-makers in local and central public sector authorities an accepted instrument for the realisation of investment plans and in this way an alternative for the traditional form of procurement. As elementary part of the research programme, in January 1999 a knowledge centre with regard to PPP was established at the Ministry of Finance.

From the start of the PPP Knowledge Centre, the primary drive of PPP shifted from public budgetary restrictions to the gaining of better value for money as compared to traditional public sector procurement and public management of public infrastructure. The value for money concept will be explored in detail in section 5.2 of this report, but in short it can be explained as gaining more quality (value) for the same budget (money), or the same quality for a smaller budget.

This PPP Knowledge Centre has three main functions:

- To act as a central source of information, from which the knowledge of and experience in working with PPP projects gathered by the centre can be disseminated to all public and private sector parties that are (interested in getting) involved with PPP;
- To assist as think-tank and advisor in the governmental policy and regulation on partnerships between the public and private sector and in making decisions regarding PPP proposals;
- To stimulate the use of PPPs in realising government investment plans by making proposals for attractive projects and to examine ways in which the government can enter into partnerships with the private sector.

4.3.2 Overview of PFI development

As has been mentioned in the previous subsection, the main objective of the PPP research programme initiated by the Ministry of Finance was to make PPP for local and central policy-makers an accepted instrument for the realisation of investment plans in the Netherlands.

It can be concluded that this objective by now has been achieved. However, the actual application of PPP (in the manifestations of PFI as well as alliance projects) is too incidental. The latest progress report “Voortgangsrappportage PPS. Van incidenteel naar structuureel” (November 2004) of the PPP Knowledge Centre therefore states that the challenge for the coming years is to come to a structural application of PPP. This report

focuses on PFI, therefore only the progress that has been made in PFI (or “concession”/“DBFM/O”) projects will be discussed. The evaluation covers the period from January 1999, in which the PPP Knowledge Centre was established, to date. The contents of this evaluation are primarily based on the above mentioned progress report of the PPP Knowledge Centre.

The Dutch government had decided to introduce the PFI procurement procedure gradually, rather than with a “big-bang”. The reason for this was the lack of appropriate skills and experience at both the public and private side in order to start a large number of PFI projects. The government’s PFI policy took shape in the following pilot projects:

**Transport-infrastructure**

- **High Speed Line (HSL) South Infrastructure (125 km)** (Contract close: December 2001);
  The private consortium “Infraspeed” is responsible for the design, build and finance of the superstructure of the HSL South (including among other things the rails, overhead wires and communication and safety systems) and the maintenance of the sub- and superstructure for 25 years. The consortium consists of Fluor Daniel, Siemens, Royal BAM Group and the UK-based institutional investors Innisfree and HSBC.

- **Road project A59 Rosmalen-Geefsen (9 km)** (Contract close: February 2003);
  The private consortium “De Poort van Den Bosch” is responsible for the design, build, finance and maintenance (DBFM) of the reconstruction of the provincial road N59 Rosmalen – Geefsen (near Bois-le-Duc) into the freeway A59. After completion of the new A59, which is planned in January 2006, the consortium will maintain the road for 15 years. The consortium consists of Royal BAM Group, Boskalis and Fluor Daniel.

- **Road project N31 Leeuwarden-Drachten (13 km)** (Contract close: December 2003);
  The private consortium “Wâldwei” is responsible for the design, build, finance and maintenance (DBFM) of the reconstruction of the single road (1x1) N31 between Leeuwarden and Nijega to a double road (2x2), of an aqueduct and bridge and the maintenance of the existing double road between Nijega and Drachten for a period of 20 years. The consortium consists of Royal BAM Group, Ballast Nedam and Dura Vermeer.

**Utilities**

- **Wastewater treatment plant** (Contract close: December 2003);
  The private consortium “Delfluent” has been commissioned by the Delfland District Water Authority to design, build, finance, maintain and operate (DBFMO) a waste water treatment plant at Harmonsholder in Midden-Delfland (a municipality adjacent to Rijswijk and Delft) and to renovate, finance, maintain and operate an existing waste water treatment plant at the Houtrustweg, The Hague. The contract encompasses 30 years. The participants in the consortium are Veolia Water, Evides (previously Delta Waterbedrijf and Waterbedrijf Euroopport), Rabobank, Heijmans and Strukton.
Public building

- Montaigne Lyceum (Contract close: December 2004);
The private consortium "TalentGroep" has been commissioned by the municipality of The Hague a 30-year contract to design, build, finance, maintain and operate (DBFMO) the secondary school Montaigne Lyceum in Ypenburg, The Hague. The participants in the consortium are Strukton, Intech and ISS. See for a brief description of this project section 12.4.

- Ministry of Finance (Contract close: expected in spring 2006);
In August 2004, the formal PFI procurement procedure started for the renovation of the headquarters of the Ministry of Finance in The Hague. The Government Buildings Agency (procuring authority) and Ministry of Finance (Employer) have selected in August 2005 two private consortia on the basis of their tender-offers. The plan is to come to contract closure in spring 2006 after which the renovation starts. See for a brief description of this project section 12.5.

Healthcare

In the Dutch health care sector research has been executed regarding the feasibility of applying PFI for the new build and renovation of the hospital "Groene Hart Ziekenhuis" (GHZ) in Gouda. In spring 2004, the board of directors of the GHZ was approached by the PPP Knowledge Centre of the Ministry of Finance and the Ministry of Health, Welfare and Sport with the question if they would be willing to co-operate in a pilot project. After positive discussions, a so-called Public Private Comparator (PPC) study had been executed. This study gives insight into the potential added value of the application of PFI in comparison with the traditional procurement procedure.

The primary result of this study was that the attractiveness of PFI is connected with the developments in the Dutch health care sector. In case of a progressive scenario, with more market influence in and liberalisation (easing of the rigid rules) of the health care sector, it is worth while to apply PFI. See figure 4.5 for a recent newspaper article reporting about the excess of rules in the Dutch health care sector. In this article, the research bureau SEO advises to radically decrease the number of rules and to liberalise the health care sector.

The board of directors of the GHZ decided in February 2005 not to make use of PFI, despite of the interest of the Dutch government in this procedure. The reason for this decision was that the planned hospital construction and renovation plans were already in a too far advanced stadium.

Figure 4.5: Newspaper article: "Excess of rules cripples health care" (July 30, 2005), De Volkskrant

30 Pps: de weg voorwaarts voor GHZ? (November 2004), RebelGroup/ Zorgconsult
31 Zorgvisie, February 2005
4.4 Types of PFI Projects

There are different types of projects that qualify within PFI. The British HM Treasury Private Finance Panel distinguishes three groups of projects: financially free-standing projects, services sold to the public sector and joint ventures.

4.4.1 Financially free-standing projects

In this type of project, the private sector undertakes the design, construction, maintenance, operation and finance (so there are generally no public funds involved). The project also may involve taking over by the private sector the maintenance and exploitation of an existing asset. The private sector’s costs are entirely recovered through fees and charges for the services to the final users of the asset (for example real/ shadow tolls in case of a bridge or motorway), so the user pays. This type of project is also known as Build-Operate-Transfer (BOT). The public sector may contribute to the project by for example undertaking the initial project planning, assisting with statutory procedures and determining the route of a linking road. With these types of projects, the private sector is fully responsible for the commercial viability of the project.

Obviously, financially free-standing projects often concern transport-oriented projects (toll), such as the Skye Bridge (1995, Scotland) and the Second Severn Bridge (1996) joining England and Wales.

4.4.2 Services sold to the public sector

These are public services designed, build, financed, maintained and/or operated (DBFM/O) by the private sector, based on output specifications decided by the public Employer. Financial recovery takes place by unitary charge payments from the public sector. Examples of this type of projects can be found in various sectors in the public sector, such as education, health care, transport-infrastructure, utilities and the prison sector. The greatest part of the PFI projects in the UK are characterized by services sold to the public sector.

The private sector (consortium) is for example responsible for the provision of:

- Hospital accommodation and supply of clinical waste incineration and other non-core hospital services, such as cleaning and catering;
- Prison accommodation and services including reception, education and training (workshops) for the benefit of prisoners.

4.4.3 Joint venture projects

In joint ventures both the public and private sectors contribute in funding the project, though with the private sector retaining ownership and overall control of the asset provided. Contributions of the public sector reflect social benefits of a project not expected to be reflected in future cash flows.

Occasionally, projects that the public sector would like to realise are financially not sufficiently robust to be funded completely by private finance. The public sector may contribute to reduce the investment risk to acceptable levels for the private sector. This contribution may take various forms such as additional risk sharing and direct financial contribution.
An example of this type of PFI project is the Channel Tunnel Rail Link. This is a 109 km high-speed (300 km/h) rail link, connecting the Channel Tunnel with Central London and is expected to be fully operational in 2007. This project involves £1.8 billion investment of the UK Department of Transport. Further examples are the Croydon Tram Link (2000, South London) and the Manchester Metro Link (2000).

4.5 PFI contractual structure

In order to execute a PFI project, private sector parties organise themselves in a consortium, also named as Special Purpose Vehicle (SPV). See figure 4.5 for an illustration of a typical PFI contractual structure.

![Diagram of PFI contractual structure](image)

The partners in the SPV are usually parent companies (equity holders), which put all the work that needs to be executed out to contract. The sub-contracts are normally concluded with Contractors that form part of the parent companies in the SPV (subsidiaries). These Contractors (or management companies) put different packages of work out to sub-Contractors with which they have had a good working relationship in previous projects or through a competitive tender process.
4.6 Interface Agreement

In a PFI project, the Design & Build, hard and soft FM Contractors all have a direct contract (sub-contract) with the SPV. The so-called asset spec and FM spec (see chapter 11) are placed under the sub-contracts of the DB Contractor and hard and soft FM Contractors, respectively. The sub-contracts are tailored to reflect the obligations and liabilities of the SPV in the Project Agreement. Figure 4.5 on the previous page gives an overview of the typical contractual structure in PFI.

As in projects procured traditionally, disputes between parties in PFI projects also exist and, as more PFI projects become operational, are increasing in number. In any type of "horizontal" or interface dispute between Contractors, the SPV is inevitably involved. The reason for this is that the Contractors only have a direct contract (sub-contract) with the SPV and there is no form of mutual contractual linkage between the Contractors.

Dispute resolution can end up being very costly for the SPV. In case for example Contractor 1 (Design & Build) has a dispute with Contractor 2 (Hard FM), normally the dispute comes up the line from Contractor 1 to the SPV and then is passed on from the SPV to Contractor 2. In facilitating this passing of the dispute "parcel" and in settling disputes, the SPV has to spend much money on legal and expert fees. See figure 4.6 for an illustration of the route for dispute resolution between Contractor 1 and 2.

![Figure 4.6: Route of dispute resolution between Contractors in PFI](image)

Normally, the dispute resolution procedure in PFI involves three stages that can be worked through. The first stage is consultation between the involved parties in order to come to a mutually satisfactory agreement in relation to the disputed matter. If the involved parties fail to resolve the dispute through consultation, it can be referred to an independent adjudicator (expert) in the second stage. In case either party is dissatisfied with the adjudicator’s decision and wants to challenge his findings, the dispute can be referred to arbitration or it could be taken to court for a final and binding decision.

In case of a horizontal dispute between Contractors (such as DB – hard FM), the resolution procedure can be both time-consuming and costly for the SPV. As a consequence, it would be of benefit for the shareholders of the SPV to pass the

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32 Building (8 August 2003 and 25 February 2005), Ian Yule, partner in Wragge & Co
33 Section 27 “Dispute resolution” of the Standardisation of PFI Contracts Version 3 (April 2004)
responsibility for resolving disputes down the contractual line towards the Contractors, in the same way that most of the project risk is generally passed down. To facilitate the passing down of responsibility to resolve disputes, a so-called interface, or co-operation agreement needs to be created.

The interface agreement (IA) in its simplest form is a mechanism for resolving disputes between Contractors directly without involving the SPV. Each Contractor agrees in his sub-contract with the SPV that, in relation to any dispute that concerns the performance of the other Contractor, it will proceed via the interface agreement and will exclude the SPV from involvement. The IA is then entered into between the different Contractors. With this agreement in place, the costs of resolving disputes are reduced (less involved parties) and the process of resolution is streamlined (no circuitous routes). See figure 4.7 how the IA is brought into functioning in a PFI contractual structure.

![Diagram of interface agreement between various Contractors in PFI](image)

The IA enables Contractors that have a dispute, to resolve it among themselves and to save costs in this respect. So the agreement is not only beneficial for the financial institutions that make part of the SPV, but especially also for the (Design & Build and FM) Contractors: these Contractors will save money twice over in case they are shareholders in the SPV.

So the primary function of the IA is to keep the SPV out of the "Contractor's dispute arena". With an IA in place, as already discussed above, a D&B Contractor can claim for his losses directly against an FM Contractor instead of submitting his claim to the SPV. However, in case the FM Contractor goes insolvent (bankrupt), the D&B Contractor cannot recover money from him anymore through the IA. In this scenario, the D&B Contractor ought not to lose out and should mind that he is able to recover the money from the SPV under the subcontract. At all times, PFI Contractors should be careful that the IA does not deprive them of any rights they would have had in the situation without an IA in place.  

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34 Building (25 February 2005). Ian Yule, partner in Wragge & Co; Duncan Weir, partner in Bevan Brittan LLP
In England, the IA is commonplace on recent PFI projects. Two simplified examples are given to clarify the usefulness of having an IA in place in a PFI project.

Example 1: Medical equipment

Assume a hospital PFI project, in which Contractor A is responsible for the supply and management of the medical equipment. Understandably, the various equipment units have for example different physical sizes and weights. This demands due attention in the architectural and structural design of the hospital building. Assume that Contractor B has the responsibility for the design work in this project.

Obviously, the tuning of the sub-contracts of Contractor A and Contractor B (and thus their plans how to fulfil the asset and FM spec, respectively) in the overall design work to each other is very important in order to avoid problems in the delivery of the equipment. In case Contractor A has not sufficiently made clear the electrical, architectural and structural requirements in order to put his medical equipment in, Contractor B could claim its extra design and construction costs for making the building suitable for the equipment.

Without an interface agreement in place, Contractor B would claim from the SPV and would not be concerned over whether the SPV recovered from Contractor A. The SPV recognises that Contractor A is to blame for the extra costs and as a result would pass this claim on to Contractor A, simply because both Contractor A and B have direct contract with the SPV. With an interface agreement in place, Contractor A and B could sort out the problems directly among themselves, without involving the SPV.

Example 2: Defective roof

Assume a PFI contract, in which Contractor A is responsible for the design and construction works of a building and Contractor B for the operation and maintenance of this building for a period of 30 years. The output specification in the contract calls for a building with a roof, which needs to be constructed in a way that it only needs replacement once every 20 years. However, Contractor A breaches his subcontract and delivers a roof that has to be replaced once every 10 years.

Contractor B is responsible for delivery of all the services in accordance with the output specification. Obviously, if the building has a defective roof, some or all of the services cannot be provided. To avoid being penalised, Contractor B has to face the costs of repair or replacement. However, the tender price of Contractor B is based on replacing the roof of the building once every 20 years, so replacing the roof after 10 years is not according to his offer.

If the failure of the roof takes place within the defects liability period that the SPV agreed with Contractor A, then Contractor B has the possibility to claim the costs of repair or replacement against the SPV. The SPV will then charge Contractor A with these costs. With an interface agreement in place between the two Contractors, as in example 1, Contractor A and B could sort out the problems directly among themselves, without involving the SPV.

According to Mr. D. Orobio de Castro (Stibbe, Amsterdam) the Dutch legal system would not hinder or restraining the usage of the interface-agreement in PFI projects. The agreement would not be approached very differently under Dutch law in comparison with English law; the approach could more or less be the same.
4.7 Barriers to entry into the PFI market

The PFI procurement procedure presents some major challenges to traditional Contractors. As can be concluded from section 4.2.2, PFI is becoming of growing importance for the construction industry in the United Kingdom. This also appears from the fact that public capital expenditure under PFI has increased and is expected to increase as part of the total public capital expenditures in the United Kingdom (see figure 4.3). For this reason, British Contractors are left with no option but to consider the concept of PFI. A number of barriers can be identified that hinder Contractors to entry the PFI market. These barriers obviously also apply to Dutch associates.

In this section three barriers of entry are highlighted: high tender costs (most importantly), lack of appropriate skills and high project values.\(^35\) The first two barriers will probably decline as the PFI industry further matures.

4.7.1 High tender costs

The most important barrier for Contractors to entry into the PFI market is the high tender costs, which discourages especially "small" Contractors (with an annual turnover of between £50 and £250 million). The costs of tendering for PFI projects are generally far higher than in traditional procurement for local or central government works. This applies not only to Contractors organised in private consortia, but also to the procuring authorities. Of course, PFI projects encompass a lot more than projects procured in the traditional way: it does not only cover the construction of an asset (such as a building), but also the whole series of design up to and including maintaining and operating the asset over a period of 25 to 35 years. This makes the process understandably much more complex and time-consuming and therefore it can be expected that the tender costs for both the public and private parties are higher than in traditional procured projects.

The development of "new" contractual documents for PFI projects requires procuring authorities to invest quite a lot of money in technical, financial and juridical expertise. In contrast to the Netherlands, the PFI market in England is maturing. British governmental departments and organisations have published various guidelines and standardised documents to streamline the PFI procurement process, drawing on experiences gained over the years. These guidelines and documents are an adequate means to lower the tender costs for both public and private parties. Examples are "A Map of the PFI Process" which was published in July 2004 by the 4ps (Public Private partnerships Programme, the local government procurement expert) and "Standardisation of PFI Contracts" of which the third version was published by the HM Treasury in April 2004.

Despite these guidelines and standardised documents, the tender costs for PFI projects are for private consortia still high. Since many private parties, especially in the Netherlands, lack appropriate skills for going through a tender process, external (legal and financial) consultants need to be employed. This employment contributes to the tender costs and makes the PFI tender process more expensive compared to traditional procurement, apart from the costs to assemble a consortium of various disciplines and to

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\(^35\) The barriers to entry into the PFI market (1997), Ekene I. Ezulike, John G. Perry and Kamel Hawwash, Engineering, Construction and Architectural Management (Volume 4, number 3)

In this paper results are reported of a study of construction Contractors in the UK regarding their experiences with PFI. The results comprise data from 14 interviews with 9 Contractors to consider the barriers to entry into the PFI market. The Contractors are divided in 3 categories regarding annual turnover: small (£50-£249m), medium (£250-£499m) and large (in excess of £500m).
prepare a tender offer. The problem of high legal fees is expressed in the following statement\textsuperscript{36} of Mr. R. Herzberg, Carillion’s managing director of private finance:

"Legal fees are one of the (...) major causes of high bid costs. I am pleased with what the Treasury has done to standardise contracts, but it is essential lawyers abide by that."

There is unfortunately little hard evidence regarding the tender costs of Contractors, as these are usually considered to be confidential. However, some evidence does exist from a survey\textsuperscript{37} of Contractors’ tender costs for a number of major PFI transport infrastructure, healthcare and prison projects. These figures are indicated in figure 4.9 on the next page, where average tender costs of 3 procurement routes (PFI, Design & Build and traditional) are compared across different project sizes. The average tender costs are expressed as a percentage of the expected total project costs. Important to note is that the survey was (probably) executed in 1994, so in the very early years of PFI when both public and private parties had gained scarcely experience.

![Percentage of project costs vs. Total project costs (in million £)](image)

**Figure 4.9:** Average tender costs of 3 procurement routes (PFI, Design & Build and traditional), expressed as a percentage of the expected total project costs

The following conclusions can be drawn from this figure:

- The average tender costs in PFI are far higher than the average tender costs in Design & Build and traditional procurement methods (no matter what project size). This conclusion underlines the statement made in the first paragraph of this section;
- The average PFI tender costs indicated in the diagram are not the total tender costs, as many of the interviewed Contractors revealed only the costs of achieving preferred tenderer status. So the tender costs up to and including contract signature (financial close) in PFI are even greater;
- There appear to be no economies of scale in PFI regarding tender costs, unlike in the Design & Build and traditional procurement routes. As can be seen in the diagram, PFI tender costs do not diminish as a percentage of the total project costs.

The high cost of tendering has an effect on the way British Contractors perceive opportunities in the PFI market: they are selective as to the projects they tender for.\textsuperscript{38}

\textsuperscript{36} Building magazine (April 22, 2005)
\textsuperscript{37} The survey was conducted by the Building Employers Confederation (BEC) and Sir Michael Latham (Constructing the Team) probably in 1994. The results of the survey were reproduced in "Seize the Initiative" by Dr Eamonn Butler and Allan Stewart MP, Adam Smith Institute, London, 1996.
\textsuperscript{38} The barriers to entry into the PFI market (1997), Ekene I. Ezuflke, John G. Perry and Kamel Hawwash, Engineering, Construction and Architectural Management (Volume 4, number 3)
This means that Contractors only tender for projects that they are confident of winning, as long as the projects have passed their internally developed project selection criteria.

Tackling tender costs

In the United Kingdom as well as in the Netherlands the problem of how to deal with high tender costs is these days highly listed on the agendas of organisations involved in PFI. This shows for example from the Building magazine article “PFI experts in conflict over how to tackle bid costs” (April 22, 2005) in which two leading British authorities on PFI clashed over how the private and public sector should tackle tender costs. In the Netherlands, the Government Building Agency (GBA) (Dutch: Rijksgebouwendienst) organised in co-operation with the General Alliance of the Building Trade (Dutch: Algemeen Verbond Bouwbedrijf, AVBB) and the Confederation of Dutch Industry and Employers (Dutch: VNO-NCW) in November 2004 a conference about tender costs in PFI public building projects.

4.7.2 Lack of appropriate skills

For many years, also the construction industry in England is dominated by the traditional procurement procedure (the Bid-Build model). In the tendering stage, a Contractor is traditionally concerned with pricing a customised design (drawings and specification) that is provided by the Employer. Under PFI, however, Contractors have to tender for work that includes the design, construction, maintenance, operation and finance of an asset over a long-term period. Clearly, in costing a PFI project, the whole lifetime of the project needs to be considered and not just the (short-term) construction stage. This whole life costing has not been widely adopted in the construction industry. This is due to the fragmented nature of the industry (large range of professional firms specialised in small areas) and the strict contractual separation between the different stages of the building process (design, construction, maintenance and operation).

It can be concluded that “traditional” construction and hard FM work differs considerably from PFI, both in the skills required and the processes involved. PFI represents therefore a considerable departure from the traditional business of a Contractor. For a Contractor, participating in a PFI project requires skills regarding amongst other things project management, extensive risk assessment and allocation, relationship building and long-term maintenance and operation. Many Contractors lack these type of skills, because these are generally perceived to be outside the scope of their core business. Only large Contractors have the financial capability and resources to develop these skills and to compete in the PFI market. Hence, they have in PFI a competitive advantage in comparison with smaller Contractors, particularly in large and complex projects.

4.7.3 High project values

The great majority of projects that are procured under PFI are significant in size and have a considerable high capital value (often in excess of £30 million). These values are usually too high for (small) Contractors with an annual turnover of between £50 and £250 million to tender for. Projects of these magnitudes would expose those Contractors to a large commercial risk of “putting all their eggs into one basket”. The role that small Contractors could fulfil is the role of sub-Contractor to a main-Contractor. Larger Contractors do have the capability to take on high capital value projects and are, not surprisingly, less concerned about the project value. In fact, a good way of overcoming the issue of not being able to tender for projects of high capital value could be to form a partnership with one or more Contractors.
5 PFI benefits and value for money

In this chapter first the benefits are described that PFI can offer in delivering public services. The concept of value for money will be explored in the second section. In conclusion, key drivers to value for money are identified.

5.1 PFI benefits

A number of significant benefits can be associated with PFI from the public sector's perspective. Where this procurement route is effectively utilised, it could offer, as compared to traditional procurement, the public sector the following benefits:

Value for money
Delivering better "value for money" (Dutch: betere prijs/kwaliteit verhouding) in comparison with other types of procurement procedures forms to date the main argument for the English and Dutch government to employ the PFI concept. Better value for money, so better use of public (tax payer's) money, can be expressed in:

- *Price and time certainty:* Public services delivered through PFI are more likely to be delivered within budget and to start according to schedule. The SPV bears the risk of cost overruns other than due to changes in (the level of) performance standards (variations) by the public Employer or due to unforeseen changes in law.

  The SPV (usually) only receives payments from the public authority from the moment the facility is delivered and available for operation. A time overrun can have catastrophic consequences for the construction Contractor, because it delays the start of the income stream from the public Employer. The SPV has to repay the loans it has agreed with the financial institutions (banks) from this income. Time is money, because any delay in the start of repayments results in heavy charges for the SPV imposed by the banks. These costs will be recouped from the construction Contractor, what creates an obvious incentive for the Contractor to complete his construction works on time. Therefore, the essence of time in PFI may not be underestimated.

  The record of traditional procurement regarding delivery to budget and time is very poor. Frequently, there are budgets overruns and delays before public assets become operational. See for more information about this in appendix A.

- *Forward and backward integration of building process stages:* The public Employer has to deal with just one contract "party" (the SPV) and as a result of integration of
building process stages, traditional interface problems between these stages and conflicts between participants in the building process could be reduced.

- Private sector's primacy over the public sector: By contracting out to the private sector of almost an entire project's lifetime (from design to operation), use can be made of the private sector's project management skills, creative design capabilities and risk management expertise. In this way, opportunities could be created for working more efficient and to improve the (design, construction and operational) quality of public services.

- Fulfilling required performance standards over the entire lifetime of the project: Since in PFI private capital is at risk and income streams depend on the level of performance, a strong incentive is present for the SPV to maintain the required service standards of the project throughout the contract term. In contrast, in projects procured traditionally, the maintenance part of the asset and the quality of services are dependent on the public sector making funds available for these purposes. In PFI, money for maintenance purposes is reserved and secured from the moment of contract signature.

Early focus on required output
PFI focuses the Employer better and earlier than in traditional procurement on what he wants to have as new or renovated public service. In essence, PFI as a procurement procedure is not needed for this focus. In a traditional route, if well managed, this focus could be present to. But PFI actually forces the Employer to think about his (long-term) performance requirements, because of the contractual rigid nature of PFI: it is quite difficult to make a change (see section 14.3). As a result, there are in PFI less "late" changes, which are in many cases the cause of the above-mentioned budget overruns and delays in projects procured traditionally by the public sector.39

Concentration on core activities
In PFI public building projects, the SPV is responsible for all the aspects regarding the building: from design up to and including operation (hard/soft FM services). The Employer (or better said: the users) can therefore concentrate on their core or primary activities. If the project concerns a school, then this activity is "teaching" and if the project concerns a hospital, then the activity is delivering clinical services. So PFI can contribute to unburden the Employer.

Off-balance sheet financing
PFI might be a means for the public sector to respond to the national need for spending on public services in a period of stringent public budgets. In the English PFI model, the capital expenditure that goes with a project is regularly not accounted as "public expenditure". In other words, it can be indicated as "off-balance sheet".40 The on- or off-balance sheet issue depends on whether the public Employer is the legal owner of a property (for example a building) provided through PFI. If the Employer is the owner and bears the risks associated with the ownership (which depends on the contract terms) then the property should be accounted as an asset on the balance sheet of the authority in the

39 Quotation of Mr. Miles Delap (Director) Gardiner & Theobald Management Services (London): "Generally speaking, in my experience users do not focus what they want to have, until 6 months before they absolutely have to make a decision."

40 HM Treasury report "PFI: Meeting the investment challenge" (July 2003)
same way as properties that have been built through traditional procurement. The accounting treatment of PFI projects in England takes place in accordance with principles set by the national Accounting Standards Board (ASB).

Up to and including 2003, 43 per cent of all PFI capital expenditure in the United Kingdom was not scored on the public authority's balance sheets. Anyway, the public sector is committed to pay for the projects in the future. In PFI the private sector only finances and does not pay the expenses of public service projects. This point is illustrated in the following comments of Mr. P. Stephens, columnist of the Financial Times:

"The most obvious effect [of PFI] on the public finances is to reduce spending now and replace it with a stream of future liabilities. A private Contractor picks up the bill for the construction of, say, a new prison, while the taxpayer guarantees it an income spread out over the lifetime of the asset. Today's capital investment thus becomes tomorrow's current spending."

Stimulation of whole-life costing

Design and construction costs are in traditional procurement emphasised in project feasibility studies. The consideration of maintenance and operational costs usually has a lower priority. In PFI procurement, the tender offers of private consortia need to incorporate both the capital and the ongoing maintenance and/or operating costs of the project. So the procuring authority and especially the tendering consortia are forced in PFI to take well account of whole-life costing of a project before contract closure.

5.2 The concept of value for money

The HM Treasury report on PFI entitled “PFI: Meeting the Investment Challenge” (2003) states that PFI will only be used to deliver a public investment plan, when it will deliver better “value for money” (or surplus value) in comparison with other (traditional) procurement procedures. The British government defines “best value for money” as follows⁴¹:

Best value for money is perceived as the optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user requirement.

The concept of value for money will be explored through making use of the “Sales Agreement” model, described in the lecture notes of the course “Collaboration and procurement procedures in the civil engineering industry (CT5981)".

Each form of collaboration involves an agreement between the involved parties. The most simplistic form of an agreement is the sales agreement, in which two parties play an important role: the demander and supplier (see figure 5.1).

If an Employer (demander) wants to buy a particular product, he compares the value he assigns to that product with the price that needs to be paid for it. In case this value is higher than the price, the Employer will buy the product, unless he expects to find a larger (more positive) difference between value and price somewhere else. On the other side, a manufacturer (supplier) of the product needs to make costs to produce the product. Adding a profit margin to these product costs results in the selling price of the product by

⁴¹ HM Treasury report “PFI: Meeting the Investment challenge” (July 2003)
the manufacturer. So as a result, a (simplified) sales agreement is characterized by the aspects value, price and cost.

![Sales agreement model](image)

Figure 5.1: Sales agreement model

As illustrated in the figure, there is a positive difference between value and price (benefit) and also between price and costs (profit). In this situation both the demander and supplier are satisfied, which is a prerequisite for the (sales) agreement to be concluded.

When a project can be delivered (supplied) through several different procurement procedures, an Employer (demande) obviously will choose the procedure that will deliver him the best value for his budget (money). This does not always mean that the "lowest price option" has to be chosen, because also quality does matter.

5.3 Value for money assessment

The public sector’s objective in procurement decision-making regarding projects is to strive for the procurement route that will offer the best value for money (VFM). The results in appendix A show that PFI works well in the UK in the highlighted sectors, but that does not mean that PFI should always be preferred above the traditional procurement route. Therefore, a comprehensive VFM assessment of both the PFI and traditional routes are executed by procuring authorities in England and the Netherlands.

5.3.1 VFM assessment in England

Up to the second half of 2004, PFI projects in England have been assessed for VFM solely at individual project level. The quantitative part of the assessment, the so-called Public Sector Comparator (PSC), played a major role in comparing the costs of PFI procurement with the traditional route.

The planning stage of a project incorporates the development of the PSC (see section 7.1). This instrument is used to assess quantitatively whether for the preferred project option the PFI procurement route offers better VFM than traditional procurement.

In the planning stage, the preferred project option is worked out in sufficient detail in accordance with the draft output specification in order to develop the PSC. It gives a preliminary costing of the complete project, including the valuation of the risks in financial terms, which can be expected if the traditional procurement procedure is applied to execute the project. These expected costs are used as benchmark against which the expected costs of the PFI option are evaluated. So the PSC provides a quantitative
analysis in financial terms to support a judgement of what procurement route offers best VFM.

However, procuring authorities in England tend to treat the PSC as a single pass/fail test to justify the choice for PFI. What should be noted is that, although the PSC is an effective appraisal tool, the quantitative analysis is just one part of an overall assessment of a project's VFM. Due consideration should also be taken of qualitative arguments why the procuring authority could engage in PFI. This is especially important where PFI tender-offers are very close to the expected costs of the PSC. The HM Treasury Taskforce defines the PSC as:42

"A hypothetical, risk-adjusted costing, by the public sector as a supplier, to an output specification produced as part of a PFI procurement exercise."

Besides testing whether PFI demonstrates VFM, the PSC serves the next purposes:

- Determining the project's affordability to the procuring authority by focusing on full lifetime costing and risks at an early stage; and
- Functioning during the procurement procedure as a management tool to communicate with the tendering private consortia on key aspects as the output specification and risk allocation.

Characteristics of the PSC are the following (see figure 5.2):

- The costs are expressed in net present value (NPV) terms. The NPV takes account of the "time value" of money through discounting. It enables to compare cash flows taking place on different times, for example during the construction and operation stage. It is a way to find the value in "today's euros" of the future project cash flows;
- In the PSC full account is taken of the risks that would be encountered in the traditional public procurement form in order to be used as a meaningful VFM benchmark.

![Diagram of PSC and Expected PFI tender offer](image-url)

Figure 5.2: Comparison of expected costs (NPV) between the PSC and expected PFI tender offer

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42 Treasury Taskforce Private Finance, Technical Note No. 5: "How to construct a Public Sector Comparator". The Treasury Taskforce issues series of Technical Notes to provide detailed practical help for public sector managers involved in PFI procurement.
During the early stages of the PFI procurement procedure subsequent to the planning stage, the procuring authority gradually gains more knowledge about the project under consideration. The output specification is developed in greater depth and the risk analysis may be adjusted or supplemented because of advanced insight into the project. The PSC is therefore reviewed and updated where necessary.

Risks and the PSC
As has been stated above, one of the characteristics of the PSC is that it takes full account of the risks that would be encountered in the traditional procurement procedure. As can be seen in figure 5.2, the risk adjustment forms a substantial part of the PSC and needs thoroughly taken into account. However, the risk analysis is considered as the most contentious issue in developing the PSC. Therefore, much attention needs to be devoted in the assignment of financial values to risks.

The risk analysis typically consists of the following steps:

1. **Identification of the project risks;**
   For example: construction risk. This is the risk that, in case of a project encompassing new build works, the construction of assets is not completed on time and/or to budget. See chapter 6 for different types of specific risks that can be identified in a PFI project.

2. **Estimation of the probability of occurrence of each of the risks that have been identified;**
   In case of the example of construction risk: based on available information pertaining to similar projects that have been delivered by the public sector in the past, a probability of the occurrence of cost overruns is 50%.

3. **Quantification in financial terms of the consequences of the risks at occurrence in case the public sector is developing the project;**
   In case of the example of construction risk: again, based on past public sector experience, an overrun of 20% of the construction costs is anticipated.

4. **Valuation of the cost of the risks at occurrence in financial terms;**
   The technological definition of the valuation of risk in financial terms in chapter 6 is recalled:

   \[
   \text{RISK} = \text{probability of occurrence of risk} \times \text{financial consequence of risk at occurrence}
   \]

   Say that the total construction costs in the example are €100 million, the valuation of the construction risk in financial terms would be: 0.50 \times (0.20 \times €100 \text{ million}) = €10 million.

5. **Allocation of risk between the Employer and private consortium.**
   As will be discussed in chapter 6, the identified project risks can be ordered in three groups from the point of view of the Employer: retained, transferred and shared risks.
Historically, the English (as well as the Dutch public sector) has often been deficient in accounting for risks in traditional procurement. As a result, budgets and time schedules for major public service projects frequently have been prone to optimism bias. In other words, budgets and time schedules were not realistically calculated respectively composed, with huge cost overruns and late delivery as a result. Numerous dramatic cases from the construction practice can be mentioned as illustration of the consequences of this bias. Furthermore, procuring authorities often had little incentive to manage risks effectively, because eventually the taxpayer "pays the piper".

However, in the assessment process regarding what procurement option (traditional – PFI) offers best value for money, the risk analysis takes an important stand. Therefore, with the calculation of the PSC, a more realistic approach of the expected costs is achieved.

Some reports of the British National Audit Office, for example the "Ministry of Defence Redevelopment of MOD Main Building" report (2002), have highlighted a number of issues relating to the use of the PSC as a PFI decision-making tool. Considerable emphasis was put on the fact that financial comparison is just one part of an overall assessment of a project's value for money. In other words, the cost to the taxpayer of a PFI route should not be the only consideration made by the public sector when awarding contracts, also other aspects should be taken into account as quality and risk management capabilities of the tendering consortia in PFI projects.

New approach to VFM assessment
Due to significant changes in the British government's approach to investment appraisal set out in the Green Book\textsuperscript{43}, HM Treasury published new guidance on PFI VFM assessment in August 2004. This new guidance describes a PFI appraisal process in which a three level procedure is worked through, instead of focusing solely on the project level. In sequence of a broad to narrow scope, these levels are\textsuperscript{44}:

- Programme Level
- Project Level
- Procurement level

In essence, the PSC gives a financial analysis of a project that is executed according to traditional procurement. But the new guidance has reformed the way in which the PSC is calculated and in which stages it is used during the planning and procurement process. For more information on the new approach to VFM assessment is referred to the "Value for Money Assessment Guidance", published by the HM Treasury (August 2004).

5.3.2 VFM assessment in the Netherlands
To compare the PFI option for the delivery of public services with traditional procurement, the Dutch PPP Knowledge Centre has developed two financial comparison instruments: the Public Private Comparator (PPC) and the Public Sector Comparator (PSC). The purpose of these instruments are the same as the English PSC.

\textsuperscript{43} The Green Book (revised in January 2003) is a English best practice guide to carry out economic appraisal (ex ante) and evaluation (ex post) of policies and capital projects. It is used by central government departments, by regional agencies and local government, especially for proposals requiring funding from central government.

\textsuperscript{44} PFI: Meeting the Investment Challenge (July 2003) & Value for Money Assessment Guidance (August 2004), HM Treasury
The PPC is used in the planning stage of a project, before the start of the PFI procurement procedure. The PPC gives, before the choice for the PFI procurement route is made, a first financial comparison of the PFI and traditional procurement route. The PSC is a more detailed financial analysis of the proposed project procured traditionally. This instrument functions as a benchmark for the tender-offers of the private consortia.

For more information on these is referred to the PPC and PSC guidelines of the PPP Knowledge Centre.
6 Risk allocation

The appropriate allocation of risk between the public and private sector in PFI projects is the key driver to ensure that value for money is realised.

The technological definition of the valuation of risk in financial terms is:

\[
\text{RISK} = (\text{probability of occurrence of risk}) \times (\text{financial consequence of risk at occurrence})
\]

For risk allocation between parties, the guiding principle for improving value for money is that the party, which is capable of both estimating and controlling a particular risk in the best possible way, should bear that risk. This means that a particular risk is allocated at the party best able to reduce either the probability of the specific risk occurring, or the financial consequences in case the risk does occurs, or both.

However, if risks in a PFI project are transferred from the public to the private sector that cannot be best managed by the private sector, the value for money of the project will decline. The reason for this is that in this situation the costs of risk transfer (premiums demanded by the private sector for bearing these "uncontrollable" risks) would outweigh the benefit for the public sector. So in that situation it is better for the public sector to retain those risks.

This is in particular of importance for projects where the demand for the facility is entirely depending on the public sector. In a PFI contract regarding for example a prison facility, the risk concerning occupancy levels of the facility must be the full responsibility of the public sector and not of the private consortium. Obviously, it is not possible for the private sector to stimulate or even control the "demand" for prison cells.

6.1 Risks and value for money

For achieving best value for money, an optimum risk transfer is a prerequisite. This is illustrated graphically is figure 6.1. So optimum, rather than maximum, risk transfer is important in PFI.

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43 PFI Material, Office of Government Commerce, United Kingdom
6.2 Risks allocation (Employer – SPV)

The many different types of identified risks in a PFI project can in terms of allocation be ordered in three groups of risks. From the point of view of the Employer, the following groups of risks can be distinguished:

- Retained risks
  Risks that the Employer does not transfer to the SPV, but retains itself as in traditional procurement.

- Transferred risks
  Risks that the Employer transfers to the SPV, because the SPV is regarded as being better able to manage these risks.

- Shared risks
  Risks of which it cannot be stated beforehand whether they will be retained by the Employer or transferred to the SPV. The extent of risk sharing may result from negotiations between the Employer and tendering private consortia with the value for money impact on the particular project being considered.

A preliminary allocation of risk is proposed in the planning stage (see section 7.1). On the basis of this risk allocation, the Public Sector Comparator (PSC) is drafted and discussion takes place between the Employer and selected short-list consortia. These consortia may propose an alternative allocation of risk in their tender offer, which could be beneficial for both parties. The finalisation of the risk allocation between the Employer and private consortium is achieved after detailed negotiations at commercial closure of the contract.

A. Retained risks normally involve the following:

Demand risk
This concerns the possibility of change in the need for the facility over the contract’s term and the adequacy of its overall size to meet public needs. If, for example, a school building cannot be fully occupied with pupils by the time the building is delivered or during
the contract’s term because of low demand, the public Employer is responsible and should continue to pay unitary charges for the school. Moreover, if the public Employer underestimated the capacity of the school to be delivered to meet the required demand, the public Employer is also responsible.

Output specification risk
This relates to the possibility of change in initial public sector requirements during the term of the contract. If during the term of the contract the public needs regarding the facility change or standards of delivery set by the public sector do not sufficiently meet the public needs, the public Employer is responsible for alterations that have to be made in output specification. Provisions for flexibility to cover this risk of changing requirements should be included in the contract.

Inflation risk
Unitary charges are subject to inflation and the Employer is responsible for adjusting these charges to future inflation rates.

B. Risks that are transferred from the Employer to the SPV over the term of the contract involve the following:

Project financing risk
This risk concerns the ability of the SPV to obtain an economically viable financial package. It can be divided into two types of sub risks:

- Internal disposal risk:
The internal disposal risk is the risk for the private sector that the value of surplus public sector assets, appointed for disposal in a PFI contract by the public sector to fund public services, is lower than expected. The public sector can reduce its exposure to this risk by transferring more assets, such as redundant grounds, to the private sector.

In PFI projects the operational control of an existing facility can be made available by the procuring authority as part of the concession offered to the tendering consortia. In this way, the procuring authority can make PFI projects financially more attractive for the private consortia, because with the operation of an existing facility revenues could be generated. These may be used by the tendering consortia to reduce loans, to repay investors earlier in the project’s lifetime and to partly cover operating expenses. The commercial success or failure of an existing facility must be considered by the private party at the tendering stage in order to determine the financial feasibility of the proposed concession. For example, with the concession to operate an existing bridge crossing as part of the Sydney Harbour Tunnel project, generated the private sector consortium revenues with which a part of its debt could be repaid earlier than planned in the project’s lifetime.

- External financing risk:
The external financing risk is the risk that the SPV fails to secure sufficient funding for a PFI project on the capital market. This risk may be reduced to acceptable levels by public sector participation.

Design risk
This risk concerns the possibility of failure of the design to meet the required output specifications. In case the design of the facility is unable to provide for the required
service standards stated in the output specifications, the private sector is responsible and needs to pay for the costs of rectifying the design to meet the required standards.

Construction risk
This relates to the risk of cost overruns during construction and out-of-time delivery. If, for example, during the construction works of a building appears that the soil conditions require a considerably more extensive foundation than was accounted for in the design, then the private sector is responsible for covering the extra costs in order to complete the building according to the required construction standards. Furthermore, if, as a result of the adverse soil conditions, the building is completed out-of-time, no payments of unitary charges will be made to the private sector until the building is available.

Residual value risk
This concerns the value of an asset at the end of a contract, which may or may not be realisable by the private sector. Once the contract is expired, ownership of the asset either remains with the private sector or is returned to the public sector, depending on the terms of the contract. Obviously, in both cases the residual value of the asset is of great interest for the private sector and gives the private sector an incentive to keep the assets in good order throughout the period of the contract.

C. Risks of which it cannot be stated beforehand whether they will be retained by the public sector or transferred to the private sector among others involve the following:

Change in legislation risk
This relates to the risk that legislation (concerning for example environment, taxation and construction-permission) is changed adverse for the project.
7 PFI process

This chapter considers the PFI process, from the establishment of the need for a particular service provision or improvement up to signature of the PFI contract. The PFI process will be divided in a planning stage and procurement procedure, to the degree of involvement of the private sector. The planning stage, which encompasses among other things the development of the output specification, is executed by the public sector. During this stage, however, private parties might be consulted in order to test certain assumptions made, such as the scope of the project. After all, a PFI project can only take place when there are a sufficient number of interested private parties who are able to finance and deliver the required output. Once the planning stage has been successfully concluded, the procurement procedure can start. Obviously, during this procedure the tendering private consortia play a leading role.

In writing this chapter, use is made of experiences in both England and the Netherlands with the PFI process. The following documents are consulted:

- "Education PFI Outline Business Case", developed by the Lincolnshire County Council for the Grouped Schools PFI Project;
- "A Map of the PFI Process" (July 2004), published by the British "4Ps"; and
- "Publiek-private samenwerking bij huisvestingsprojecten. Wie durft?" (June 2001), published by the Dutch PPP Knowledge Centre.

7.1 Planning stage

This section discusses the various key stages in the planning stage of a PFI project. In figure 7.1 on the next page these stages are summarised.

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46 The 4Ps (Public Private Partnerships Programme) is the British local government agency for all public private partnership schemes. The body assists local authorities to develop and procure projects through all forms of public private partnerships (including PFI) and offers advice to these authorities (and their potential partners).
Figure 7.1: Key stages in the planning stage

Shortcomings
As with every project, the planning stage starts after the need for a particular service provision or service improvement has been established at a strategic level. For example, the strategic Asset Management Plan of the Lincolnshire (England) County Council is a report that analyses the status of schools in the county on the ability to offer sufficient and suitable education. This analysis may result in any accommodation shortcomings that need to be addressed.

Objectives and project options
To achieve good understanding for the public authority of what the project intends to achieve, its objectives are formulated on the basis of the identified shortcomings in service provision. After the objectives are clear, a number of project options (such as renovation, new build or a combination of both in case of a building project) are considered in order to fulfil these objectives. After a qualitative (multi-criteria) and financial evaluation of these options, a "best value for money option" is chosen. In case the skills and expertise for these evaluations are not available in-house, the public authority has to appoint external consultants.

Affordability
A project can after all only progress if the Employer can afford the costs of the best value for money option. So thorough attention needs to be devoted to the affordability of the project for the public authority by considering various funding mechanisms available (public versus private funding). In the majority of the English PFI projects, however, it appeared that there were limited possibilities to fund the public service projects completely with public money. The majority of the funding could only come available from one source only, which is through PFI. Important to note in this respect is that in England,
once a PFI project is approved by the central government, it is supported by a grant (so-called “PFI credits”). Such financial support is often decisive in making the project affordable for the procuring authority.

Comparison instruments: PSC (English) and PPC (Dutch)

To assess whether for the chosen project option the PFI route offers better value for money than the traditional procurement procedure, in England a Public Sector Comparator (PSC) is developed (see section 5.3). The PSC gives the net present value of the expected total costs of providing the project (see also figure 5.3) in case the traditional procurement procedure is applied. These costs are used as benchmark against which the expected costs of the PFI option are evaluated (see figure 5.2). After considering the funding options available to the public authority, in many cases private funding through PFI is in England the only funding source available for the project (as has been mentioned above). This makes the development of the PSC actually superfluous. It then only acts as a justification to utilize private money in public service projects. In the Netherlands, a Public Private Comparator (PPC) is developed as comparison instrument to analyse if PFI would lead to any efficiency benefits compared to traditional public execution of the project.

It can be concluded that the objectives of the English PSC and Dutch PPC are similar. The Dutch PPC has however in comparison with the English PSC a more exploring nature and gives a just a global financial analysis on the basis of the advantages and disadvantages of PFI compared with the traditional route.

Output specification, risk allocation and payment mechanism

Drafts of key parts of the Project Agreement are worked out to test the affordability of the project, to make possible the development of the PSC/ PPC and as preparation for the PFI procurement procedure. Examples of these parts are the:

- Output specification, in which requirements for the building design and hard/ soft FM services are specified in output terms (see chapter 11);
- Risk allocation between the public authority and private consortium (see chapter 6).
- Payment mechanism, which determines the payments to the private consortium for service delivery according to the requirements set out in the output specification.

Project deliverability

Furthermore, the deliverability of the project from a practical perspective is considered in the planning stage. In this view the following issues may be addressed:

- Market interest through consultation (questionnaires, interviews);
- Results of this consultation could be used to assess the commercial viability of the proposed project and to assure a competitive procurement procedure. In doing this, care needs to be taken to ensure that there is no distortion of competition by giving a certain Contractor an advantage over another in the subsequent procurement procedure.
- Stakeholder commitment to the project;
- In a school PFI project for example the following question needs to be answered: Are the various stakeholders, such as teachers, headteachers and town council members committed to the project?
- Legal powers;
- The public authority needs to identify the various legal powers that it needs rely on in proceeding with the PFI procurement procedure and subsequently in entering into a contractual commitment with a private consortium.
Procurement procedure approach

In conclusion, in the planning stage the intended approach of the public authority is worked out with regard to the management and governance of the procurement procedure (staff, timetable) and the contents of the Project Agreement (for example whether standardized terms and conditions will be utilized). The planning stage also covers the approach of the public authority regarding the development of other procurement documentation, such as the project information pack for interested private consortia and the pre-qualification questionnaire to produce a long list of consortia.

7.2 PFI procurement procedure

If the planning stage has been concluded and the choice for the PFI route has been justified and supported by the relevant decision-makers, the formal PFI procurement procedure can start.

In this section, the key stages in the procedure are grouped under the headings “Tender issue, qualification and consultation” and “Invitation to tender, negotiation and closure of PFI deal” (see figure 7.2). The proactive involvement of the tendering private consortia in the stages of the latter group in contrast to the former one forms the inducement for this grouping.

Figure 7.2: Key stages in the PFI procurement procedure
For the procurement procedure an project management organisation is set up, which is normally a refinement of the organisation that was occupied in the planning stage. Normally, the procuring authority appoints an (internal) fulltime project director who is given the authority to "do the deal". This person is responsible for the day-to-day operational management of the project. Moreover, a project team is formed that supports the project director and has the relevant technical, financial and juridical skills and experience to deliver the project.

7.2.1 Tender issue, (pre-)qualification and consultation

Tender issue

After the project management arrangements are in place, the procurement procedure formally starts with the publication of a Contract Notice in the Official Journal of the European Union (OJEU). In some cases, it is necessary for the procuring authority to issue a Prior Information Notice (PIN), depending on the type of project. A PIN informs the private sector that a project is being developed and is likely to be formally advertised by an OJEU Contract Notice in due course.

(Pre-)qualification

Every private consortium that expresses interest in the project in pursuance of the OJEU Contract Notice receives an information pack and a pre-qualification questionnaire. The information pack provides details about the procuring authority, the proposed project, the project management arrangements, budget and a timetable for the key stages in the procurement procedure (in particular the long- and short-list stages). It furthermore explains the criteria on which selection of consortia takes place. The purpose of the pre-qualification questionnaire is to obtain information about the interested consortia regarding their technical and organisational capacity and capability to deliver the project, their financial position and experience in delivering similar projects (reference projects). This information is used by the procuring authority in the pre-qualification evaluation. This evaluation results (in case of many interested consortia) in a long-list of about 7 to 8 consortia. These consortia satisfy the criteria specified in the information pack. After the results of the evaluation are clear, the procuring authority produces a report that sets out the reasoning behind the decision to select or reject applying consortia.

Further evaluation of the pre-qualified or long-listed tenderers leads to a short-list of maximum 4 consortia. Whereas pre-qualification focuses on general competence, the selection for the final short-list or qualification takes place on the grounds of specific project competence. The qualification could take place on the basis of information already generated by the pre-qualification questionnaires in combination with interviews. The procuring authority could also request further information of the long-list tenderers to make a selection. Equally as after the pre-qualification evaluation, a report is produced after the short-listing process. This report summarises the conclusions of the selection and explains the reasoning to select or reject consortia on the long-list.

Consultation

The procuring authority may arrange a consultation between the authority and short-listed tenderers regarding project details. The authority therefore issues the draft output specification and model contract (Project Agreement) to the tenderers. The objective of this consultation is to clarify the authority's expectations and to optimise these draft documents. In (individual) conversations with the procuring authority, the consortia can comment on for them potential bottlenecks and unclear issues. They can furthermore
suppose adjustments to the documents that enable them to achieve solutions with a better quality/ price ratio (or value for money). The procuring authority could on the basis of the consultations accentuate the draft documents for all selected tenderers.

7.2.2 Invitation to tender, negotiation and closure of PFI deal

After the consultation stage and the accentuation of the draft documents (output specification and model Project Agreement), an Invitation to Tender (ITT) is sent to the (remaining) short-listed bidders. The invitation to tender is in England also referred to as the invitation to negotiate. The ITT is a development of the information pack, providing more detail in terms of instructions and guidance to the tenderers on the procedure and the timetable to be followed.

In the ITT is normally included among other things:

- Model Project Agreement (including risk allocation and payment mechanism);
- Output specification;
- Overview of the requirements for the tender-offer (planning documents, design work, calculations, performance monitoring methodology, financial structure);
- Extent to which consortia are able to submit variant offers;
- Criteria to be used for evaluation/ assessment methodology.

It is obvious that in this stage there a lot of work needs to be done by the tendering short-listed consortia.

After the tender-offers are submitted by the consortia, the procuring authority starts the evaluation. On the basis of the evaluation criteria (such as the economically most advantageous offer), normally two short-listed consortia are selected to submit a Best and Final Offer (BaFO). With these two consortia negotiations take place to come to the terms of the BaFO submission.

The selection of the preferred tenderer from the BaFOs submitted marks the end of the competitive process and is the final stage before commercial and financial contract close. Signing the PFI contract between the procuring authority and preferred tenderer is known as commercial close. Financial close is when the project financier’s (financial institution) commitment takes effect and the unitary charge payments are fixed.
8 Financing and the payment mechanism

Several finance aspects and the payment mechanism in PFI are explored in this chapter. The reason for discussing these subjects in one chapter is that in PFI they are both of main concern for the SPV. After all, with the income stream from the public Employer the SPV can fulfil its payment obligations towards the project funders.

8.1 Financing

The “PF” in PFI stand for “Private Finance”, so in this procurement procedure projects are privately financed. What needs considered, however, is that in PFI the private sector only finances and does not pay the expenses of public service projects. The public sector will eventually pay completely for the projects executed under PFI (see also section 5.1).

8.1.1 Equity and debt

The providers of finance or project funders in a PFI project can be divided in providers of equity and providers of debt.

Equity

Equity capital (Dutch: eigen vermogen) is usually provided by parties in the SPV that are involved in the construction or service delivery in a PFI project, like the Design-Build Contractor and facilities management (FM) Contractor. This capital generally comprises normally approximately 10 per cent of the total project funding. An equity investor only benefits from its investment in a PFI project after the project has been delivered and successfully in operation, because unitary charges are only paid in full from the moment an asset (for example a building) becomes completely available and all services are delivered in accordance with agreed standards. This motivates the involved Contractors to work together with a common interest in creating value for money and to actively remedy deficiencies.

Debt

Third party investors, like banks, insurance companies and other financial institutions, provide the rest (approximately 90 per cent) of the funding in debt (Dutch: vreemd vermogen). Because of this high input, they play a central role in PFI. This can typically be illustrated by the English expression that says: “He who pays the piper, calls the tune”.

Financial institutions as well as the public Employer require the investment of equity capital by Contractors involved in the project. Through this investment, they have the guarantee that the Contractors have trust in and will be committed to the execution of the project. The Contractors then also have capital at risk in the project. But it works two
ways: by providing equity capital, the Contractors can show the financial institutions and Employer their commitment to the project.

Debt/ equity ratio

Tendering consortia in PFI aim to achieve the highest possible debt/ equity ratio. In other words, they aim to attract as much bank loans (debt) as possible in arranging project finance. The reason for this is that bank loans are cheaper than equity, because equity shareholders require a relatively high return on their investment. The other reason why it is better to use bank loans is that (in England) interest payments on these loans are fully deductible for tax-purposes, whereas dividends to equity shareholders are not deductible. So a high debt/ equity ratio will be of benefit for both the consortia and procuring authority. Firstly, for a consortium its tender offer becomes more competitive and secondly, for the procuring authority, the unitary charge payments go down.

In commercial or private initiatives, it is normally very unlikely to get financial institutions to put in 90% of the required capital. The reason why PFI attracts this ratio is because financial institutions regard PFI as a form of public borrowing. Banks see the promise of a public authority to make payments under the contract (or Project Agreement) as a very strong guarantee, that they are (in exception) prepared to invest up to 90% of the required project funding as loans. Moreover, financial institutions generally do not require any undertakings or guarantees from the SPV shareholders to repay the loans. This makes them fully dependant on the project’s cash flows. 47

8.1.2 Involvement of third party finance

Third party investors (or financial institutions) perform key roles in the overall success of a PFI project to ensure the safety of their investment. These key roles comprise:

Due diligence

When investors consider financing a project, they undertake a comprehensive “due diligence work” on all aspects of the (draft) Project Agreement between the Employer and preferred tenderer, primarily regarding the financial structure of the project and risk identification & allocation. It is in the interest of the investors that all potential project risks are identified as much as possible and that in the Project Agreement each risk is allocated to the party that is best able to manage it. Ultimately, investors remain exposed to residual risk of, for example, not achieving a watertight contract structure. The main objective of due diligence work is to ensure that the project is financially robust.

Contract enforcement

When a PFI project experiences any problems, the investors will ensure that the contractual structure that they have checked during due diligence is properly enforced and that parties who have taken certain risks are accountable. This enforcement stimulates that a project will be completed, which is in favour of all involved parties.

Taking overall project risk

Although the investors make sure that the majority of the project risks is allocated between the Employer and SPV, they hold the overall risk that their capital is not repaid because of failing of the project. To manage this risk, they have the right to intervene in a

47 Mr. S. St. John (legal advisor), Bovis Lend Lease (London, Harrow)
falling project and bring in new Contractors who are able to meet the requirements laid down in the Project Agreement.

8.1.3 Comparing private and public financing

Private financing of public service projects is often regarded as an unjustifiably expensive option, because the "government" can borrow money much cheaper than the private sector. This is a rather simplistic view: a government loan (Dutch: staatslening) can actually not be compared with private finance.

Government loans are virtually "risk-free", because these loans are backed by (infinite) tax revenues. In other words, the taxpayer takes on the risks associated with a project. Private sector parties, however, have no such guarantees and have to borrow on less advantageous terms. Providers of finance (equity and debt) price the risk that they loose on their investment as a result of disappointing performances of the SPV in a PFI project (risk of default). This pricing takes place by incorporating a so-called "risk premium" in the interest rates.

Financial institutions also include in the cost of private finance a (relatively low) funding premium for concluding a loan agreement with the SPV and for securing funds in the capital market. This funding premium should be more than offset through the value for money benefits generated by the SPV. See chapter 5 for these benefits and the key drivers of value for money, with risk transfer to the SPV as the primary driver of value for money. See figure 8.1 on the next page for a disproportionate indication of the explicit costs of private finance as opposed to public finance.

The magnitude of the risk premium depends on the degree in which the risks that are transferred to the SPV are controllable by the SPV partners. In case the transferred risks can be fully controlled and there is sufficient competition among financial institutions, the premium will be in accordance with the value of the risks. Under these circumstances, the risk premium also represents the value of the risks for the public sector according to the Dutch Committee of Risk Valuation (Dutch: Commissie Risicowaardering).

The risk premium should therefore also be taken into account in the costs of public finance.

In case certain transferred risks are not controllable by the SPV and/or there is a lack of competition, financial institutions tend to overprice the risks. Then the risk premium will not be in accordance with the true value of the risks and that makes, as a result, private finance too expensive. It is therefore essential that much consideration is given to risk analysis and allocation in the preparation of a PFI project.

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48 Meerwaarde, maar waarom? Kwalitatieve analyse van DBFM voor wegeninfrastructuur, drs. M. Ham (RebelGroup) and drs. E. Vergroesen (province Noord Brabant)
David Currie, employed at the London Business School, has challenged the proposition that private sector financing costs are higher than costs of public finance. He named the proponents of this thought naive and suggested that when evaluating projects:

"[...] efficiency savings are the significant factor in any decision between the two options as adopting a more appropriate approach to the evaluation of the costs of a project shows that the differences between the costs of borrowing are illusory.

One of the most fundamental points in using cost-benefit analysis to evaluate projects is to account for their impact on all individuals in a community. [...] in the private sector, investors carry the risk of default and are rewarded accordingly but in the public sector, taxpayers carry the risk but receive no commensurate reward. In other words, although the public sector can borrow at the risk-free rate to finance investment, this imposes a residual risk on taxpayers in much the same way as private sector investors, but without a reward. Clearly the contingent liability being imposed on taxpayers is a cost that ought to be accounted for in any cost-benefit analysis. Unfortunately, it is not normal practice to quantify in public balance sheet these contingent liabilities faced by the public. Once taken into account, the true cost of borrowing is the same for the public and private sector if the underlying risk of the projects is the same."

This conclusion, regarding the issue of costs of private versus public finance, is also shared by PricewaterhouseCoopers, which have executed a study by order of the HM Treasury on the assessment of the private sector rates of return in the PFI market.

8.2 Payment mechanism

The payment mechanism consolidates the agreed risk allocation between the SPV and Employer (see chapter 7), because the project is privately financed. The partners of the SPV make an investment in the project (equity) and are responsible for the provision of the remainder of necessary project funding (debt), as has been described in the first section of this chapter.

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49 Funding the London Underground, Mr. D. Currie, London Business School, March 2000
8.2.1 Unitary charge payments

The SPV receives over the contract term periodically so-called unitary charge payments from the Employer with which it has to cover debt and interest payments to the financial institutions, insurance premiums, maintenance and operating costs (building up lifecycle reserves) and equity return. The debt and interest payments generally account for the bulk of the unitary charge payments and the financial institutions obviously have a huge interest in ensuring that this payment stream is protected.

Full payment only starts from the moment the asset (for example a building) is completely available and the delivery of hard/ soft FM services commences in accordance with the quality levels specified in the output specification. The Employer is during the operational period of the contract able to make deductions from the unitary charge payments in case of poor performance by the SPV. In this way the Employer can incentivise the SPV to deliver the asset and services timely and in conformity with the in the contract agreed performance standards. Important to consider is that this system is not designed as a tool to achieve more value for money in a PFI project, because the value for money issue is already dealt with at financial contract closure.

The unitary charge payments will be agreed and fixed at financial close. The payments are likely to vary, however, during the contract term. The contract normally allows for uplift for inflation (in the UK indicated as Retail Price Index (RPI)) and the unitary charge payments may vary as a result of benchmarking and market testing of soft services. Moreover, new requirements of the Employer that fall outside the terms of the contract (changes or variations to the output specification) could result in an adjustment of the unitary charge payments.

8.2.2 Elements of the unitary charge payment

The unitary charge payments can be subdivided in different elements, depending on the type of project. The two primary elements of the payments are for availability and service:

- **Availability element for the provision of the asset (building);**
  In the English PFI public building practice is normally worked with so-called "availability units". In a (ministry) building, examples of these units are offices for the ministers, computer rooms, toilets, library and social activity rooms. Each of these units is given a different weighting for the calculation of deductions as a consequence of unavailability.

- **Service element for the provision of the hard/ soft facilities management services.**
  The following services could be included in the service element of the unitary charge payments:
  - **Hard FM services:** maintenance and control of MEP (Mechanical, Electrical and Plumbing), building fabric, conveying systems (such as lifts) and furniture;
  - **Soft FM services:** security, cleaning (external & internal), catering, help desk and waste management.

  Also each service is allocated a weighting for the purpose of calculating of service deductions depending on the quality and/ or extent of the services provided.

The unitary charge payments could also include a volume (or usage) element for services whose provision is related to the actual usage of the service. This depends for example
on the number of pupils in a school or the number of patients (clinical throughput) in a hospital. The volume element usually forms a minor part of the unitary charge payments.

For illustration, in table 8.1 the breakdown is given of the unitary charge payments at the Worcestershire Royal Hospital PFI project. See section 13.3 for a description of this project.

<table>
<thead>
<tr>
<th>Element of UCP</th>
<th>Percentage of UCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>42.6%</td>
</tr>
<tr>
<td>Service</td>
<td>47.3%</td>
</tr>
<tr>
<td>Volume</td>
<td>10.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 8.1: Breakdown of the unitary charge payment (UCP) at the Worcestershire Royal Hospital PFI project

The service (and volume) element is normally subjected to a performance monitoring regime under which deductions in payment could be applied depending upon the quality and the extent of services being provided by the SPV.

8.2.3 Performance monitoring

PFI contracts are typically based on the premise that the public Employer only pays the complete unitary charge to the SPV from the moment the building is completely available and the delivery of hard/soft FM services takes place according to the performance standards set out in the output specification. The output specification will be explored in chapter 10.

Following from this, it is necessary that there is a mechanism in place that enables the Employer to monitor the SPV's performances against the standards specified in the output specification. These standards will therefore be the starting point for establishing performance monitoring systems. Appropriate monitoring should involve the collection and evaluation of data that are quantifiable and objective in order to make the payment mechanism work.

Monitoring responsibility

In general, the SPV is responsible for the execution of performance monitoring. This means that the (sub-)Contractors need to have their own systematic monitoring system in place to provide for evidence of acceptable service delivery as the basis of payments by the Employer. The Contractor's monitoring system and reporting method have to be agreed with the Employer and become part of the contract documents after agreement. The Employer (or his audit team) normally executes audit checks to ensure that the SPV meets its contractual obligations and to verify the periodical (for example monthly) performance reports provided by the Contractors. Financial institutions may also audit, because they have a large interest in that the SPV meets the contractually agreed standards. So transparency of monitoring information is required for auditing purposes.

Monitoring methodologies

Contractors have a range of methods at their disposal to monitor the performance of hard/soft FM services during the operational stage of the contract. The monitoring

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50 Deficit before patients -- A report on the Worcester Royal Infirmary PFI and Worcestershire Hospital reconfiguration, Prof. Allyson Pollock, David Price and Dr. Matthew Dunnigan

56 Final report -- MSc Thesis -- Lessons for PFI in the Netherlands
methodology differs per project and depends on the type of service that has to be monitored. The following monitoring methodologies are customary in PFI projects:

- **Helpdesk**
  An in- or external helpdesk service can be used as a “one-stop-shop” to the Employer or Contractors for reporting service failures (for example breakdown of a heating or lighting device in an office unit). After report of a failure, the helpdesk issues work orders to the relevant Contractor (in the example the MEP Contractor).

  A customised helpdesk service is in many PFI projects in England used as the primary tool for managing information about service defaults and the performance of Contractors with regard to default remedy. Helpdesk software is therefore tuned to the output specification of a PFI project. Rectification periods to remedy defaults, for example, are incorporated to monitor the time available to fix service defaults.

  The reporting of progress on and completion of work orders makes this monitoring methodology objective and reduces the potential for disputes about whether a particular service met the standards in the output specification.

- **Continuous recording**
  Information systems such as a building management system (BMS) can provide for continuous recording of hard FM services. A BMS could encompass a variety of systems that are designed for real-time control, monitoring and optimisation of various functions and services provided in a building. These services could include heating and cooling, ventilation, lighting, security and fire alarm systems and often the management of electric appliances (such as lifts and elevators).

  As the helpdesk, the database of a BMS can provide objective evidence in the event of service defaults reported by users.

- **Spot-checking**
  The spot-checking method is typically used for monitoring soft FM services, such as security, cleaning and catering. In this monitoring methodology a list of checks is executed on a random sampling basis. Any service defaults are reported to the helpdesk for logging and rectification. As well as highlighting service defaults, the checks may identify areas where the standard of service delivery needs to be improved in order to avoid service defaults.

  The hard/ soft FM Contractors periodically (usually monthly) produce monitoring reports that are reviewed in meetings with the Employer.
In table 8.2 an example is given of a monitoring procedure regarding MEP – Electrical services to illustrate the use of above-mentioned methodologies to monitor the performance of hard FM services.

Table 8.2: Monitoring procedure regarding MEP – Electrical services

<table>
<thead>
<tr>
<th>MEP - Electrical services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Requests and complaints from users shall be logged at the helpdesk and verified by the hard FM Contractor;</td>
</tr>
<tr>
<td>2. Continuous monitoring shall take place by the building management system (BMS):</td>
</tr>
<tr>
<td>- The BMS shall alarm any form of mains power failure (Dutch: stroomuitval);</td>
</tr>
<tr>
<td>- The Uninterruptible Power Supply (UPS) unit and Standalone Standby Generator (SSG) shall be monitored by the BMS.</td>
</tr>
<tr>
<td>3. Visual checks of outlets shall be undertaken during duties in order to note any failures;</td>
</tr>
<tr>
<td>Reporting method: printed report of all special items and failures in previous month to be handed over at monthly meeting with Employer</td>
</tr>
</tbody>
</table>

Quality management system

The Employer (and financial institutions) normally requires the Contractors to have a quality management system (QMS) in place to be certain or to have more comfort that the building and hard/soft FM services are delivered according to good industry practice. This QMS should ideally be accredited to ISO or an equivalent standard. The monitoring methodologies also have to comply with the QMS as performance monitoring forms an integral part of the service delivery.

Hard and soft FM Contractors occasionally have their own QMS with matching quality documentation. In long-term contracts such as PFI, it is important that attention is devoted to the interfaces between these systems to ensure that the Employer receives a consistent service. The interface aspect is especially important in case a range of sub-Contractors is employed that have their own QMSs. There should ideally be a single QMS in PFI that is used by all Contractors involved in the delivery of services. Another possibility is the formation of a “top-level” document that binds the separate systems together.
9 Legal aspects

The contents of this chapter have been obtained to a great extent from an interview with Mr. D.C. Orobio de Castro LL.M, partner at lawyer's office "Stibbe" in Amsterdam. Up to date he has worked on two contracts for the Dutch PFI projects “High Speed Line (HSL) South Provision of Infrastructure” (2001) and “Wastewater Treatment Plant Harmaschpolder” (2003). For the HSL project, English jurists had prepared the contract and the government requested Mr. D.C. Orobio de Castro LL.M to provide for the contractual changeover from English to Dutch law. In this work he co-operated closely with his English associates. The PFI contract for the wastewater treatment plant is completely written by Mr. D.C. Orobio de Castro LL.M himself. In writing this contract, he made use of English, Dutch and also standard FIDIC contract clauses.

9.1 Introduction

The Dutch legal system does not hinder to work on the basis of an output approach as is present in PFI. It can be stated that, in general, it is good possible to apply PFI, as it works in England, under Dutch law. But not all aspects of a PFI project are regulated or dealt with under Dutch law in the same way as under English law as a result of the apparent differences between the two legal systems (see appendices B and C). There are certain aspects that do need special consideration in developing a PFI contract under Dutch law. These aspects concern bankruptcy, penalties and unforeseen circumstances and will be elaborated in this chapter.

Important to notice is that with respect to these aspects proper provisions should be incorporated in the PFI contracts. Normally, no adjustments will be made to Dutch law itself to facilitate these aspects. However, in order to make possible a PFI project, adjustments to sections of the law may be carried out. For the wastewater treatment PFI project, for example, there has been an administrative change of law to allow the contracting out of water treatment to private sector parties. Before the change this was juridically impossible.

Although PFI has an English origin, it is very unlikely that a PFI contract in the Netherlands will be developed and signed under English law. Dutch public Employers will always develop a contract to which Dutch law is applicable, even if the (influential) project funders are English and prefer English law.

9.2 Bankruptcy

Incorporating bankruptcy of especially the SPV in a PFI contract under Dutch law is difficult. In bankruptcy, emphasis is laid on the SPV, because this party is the pivot in the financial area of tension in a PFI project.

Bankruptcy under Dutch law is regulated differently compared to English law. The principal difference is that in England a so-called "receiver" is appointed, who primarily observes the interests of the project funders (debt providers). In the Netherlands a different approach is followed in case of a bankruptcy: a "trustee" looks after the interests of all creditors. These creditors include besides funders (providers of debt and equity)
mainly Contractors, who may have large claims onto the SPV, because they have not been reimbursed for example for already executed or planned construction orders. Moreover, the trustee also takes into account so-called "outside creditors" as another creditor group. This creditor is not involved in the PFI project as such, but is harmed by works carried out as part of the project. An example of an outside creditor is a person who lives near the site of a PFI project and as a result of piling during construction his house is damaged.

So in contrast to English law, the interests of creditors other than project funders are in Dutch (bankruptcy) law equally considered. Although in England contractual arrangements regarding SPV bankruptcy are difficult as well, in the Netherlands a quite sophisticated structure is needed to avoid that any creditors are being prejudiced. In the HSL PFI project, for example, extremely hard feats needed to be carried out in order to produce a contractual structure that works well under Dutch law and also satisfies the particular requirements of involved financial institutions.

9.3 Penalties

The Dutch legal system (section 6:109 of the Dutch Civil Code) incorporates rules regarding the moderation of penalties. This does, however, not match with the PFI concept, because it should be possible for the Employer to impose contractually agreed penalties on parties if these are not fulfilling the service standards set out in the contract.

Under Dutch law a judge has the authority [Dutch: bevoegdheid] to moderate the level of penalties imposed on a party if attribution of the full penalty would lead to apparently unacceptable consequences in the given circumstances (for example bankruptcy). However, to a certain extent it is possible to by-pass this issue contractually, but the judge's verdict will be eventually leading over that which the involved parties have agreed in the contract regarding penalties.

Obviously, the principle of reasonableness and fairness is involved in this. See appendix C for a discussion of this principle.

9.4 Unforeseen circumstances

Under Dutch law a judge has, in certain cases, the authority to alter the consequences of a contract or to fully or partially dissolve a contract due to unforeseen circumstances (imprévision) that take effect after contract signature and are of significant influence on the performances stated in the contract. Such as the judge having the authority to moderate penalties in certain circumstances, this authority also falls under compelling law.

Examples of unforeseen circumstances are changes in law and large fluctuations in exchange rates that adversely affects (international) participants of the project. During the development of the contract, clauses can be incorporated how to handle the effects of such unforeseen circumstances in terms of risk sharing between the public Employer and SPV. But in case one of the involved parties after jointly consultation disagrees with the eventual outcome, it is allowed to go to court. If demanded by this party, the Dutch judge has the authority to interfere in the contract.

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51 Recht voor ingenieurs, vijfde druk (2003)
Section 6:258 of the Dutch Civil Code states regarding unforeseen circumstances:

Subsection 1:

"De rechter kan op verlangen van een der partijen de gevolgen van een overeenkomst wijzigen of deze geheel of gedeeltelijk ontbinden op grond van onvoorzien omstandigheden welke van dien aard zijn, dat de wederpartij naar maatstaven van redelijkheid en billijkheid ongewijzigde instandhouding van de overeenkomst niet mag verwachten." (Dutch)

Direct translation in English:
"At the demand of one of the parties, the judge can alter the consequences of a contract or fully or partially dissolve it on the basis of unforeseen circumstances, which are of the nature that the opposing party, according to standards of reasonableness and fairness, cannot expect an unaltered preservation of the contract."

Subsection 2:

"Een wijziging of ontbinding wordt niet uitgesproken, voorzover de omstandigheden krachtens de aard van de overeenkomst of de in het verkeer geldende opvattingen voor rekening komen van diegene, die zich erop beroept." (Dutch)

Direct translation in English:
"An alteration or rescission will not be pronounced, in case the circumstances under the nature of the contract or the in the intercourse applicable views come to the account of the one, that appeals to it."

As appears from subsection 1, the principle of reasonableness and fairness (see appendix C) not only plays a role with respect to the parties’ execution of the obligations that follow from their contract. The Dutch judge also considers this principle in case of unforeseen changes in the circumstances under which the contract has been signed, if these changes make it troublesome for one of the parties to execute its original obligation stated in the contract.

The English judge traditionally considers himself not authorized or entitled to alter or put aside contractual obligations on the basis of unforeseen circumstances; "no court has absolving power". However, as has been mentioned in appendix C under the section “Approach in law cases”, over recent years Equity has gained more importance in the English jurisdiction. This gradually results in more judicial interference in a contract in case of unforeseen circumstances.

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52 Rechstelsels in vogelvlucht. Een inleiding tot de privaatrechtsvergrijzing (1981), J.G. Sauveplanne
10 Input versus output based collaboration

This chapter focuses in the following two sections on the fundamental difference in work approach between input and output based forms of collaboration.

10.1 Input perspective

For many years now, the traditional procurement procedure (the Bid-Build model) dominates the Dutch construction industry and is still the most-used procedure in building projects. In short, this procurement route comes down to the following. The roles and responsibilities of the different actors (Employer-Contractor) in the building process are clearly defined and the various stages of the process are strictly separated. The Employer (or his consultant, such as an architect) provides for the tender drawings and specification (Dutch: bestek en tekeningen). On the basis of these documents the Employer invites several Contractors to tender. Normally, the Contractor that offers the lowest price is awarded the contract to execute the works in accordance with the tender specification. During realisation the Employer (or his consultant) supervises the Contractor, which implies that he is actively involved in the realisation stage. After completion of the construction works, the contract between the Employer and Contractor is ended and the Employer takes the asset in use.

An important feature of the traditional procurement procedure is its input oriented nature. This characteristic particularly takes shape in (the contents of) the tender specification that is provided by the Employer.

The different functions of the tender specification includes the following:

- The most important function of the specification is that it forms the contractual basis for entering into an agreement between the Employer and Contractor;
- Before entering into an agreement, the Contractors that participate in the tender stage need to make a cost estimate of the works to be executed in order to make the Employer a tender offer. The specification also functions as basis for the cost estimates;
- To provide clarity with respect to the rights and obligations of the in the project involved parties;
- After award of the works to a particular Contractor, the specification forms the guideline for the realisation of the works;
- On the basis of the specification, the Employer supervises the construction works;
- In conclusion, payments will take place on the basis of the specification.

53 Lecture notes "Organisatie van het bouwen" (CT 2110), prof.dr.ir. R.A.F. Smoek
With regard to these functions, the tender specification needs to comply with the requirements that the description of the works to be executed is clear, unequivocal and complete. As a result, much attention is devoted to the following aspects (see footnote 53):

- What needs to be constructed;
- What products or materials ought to be applied;
- Under which regulations and conditions the construction works need to be executed.

Parties in the Dutch construction industry work with standardised tender specifications per sector, such as the SRW (Dutch: Standaard Referentiebestek Woningbouw), STABU (Dutch: Standaardbestek Burger- en Utiliteitsbouw) and RAW (Dutch: Rationalisatie en Automatisering Wegenbouw). In those specifications, the works to be executed are systematically described in detail, often so far that it specifies the brand name and type numbers of the products or materials that have to be applied.

The tender specification forms the basis of the input oriented perspective of the traditional procurement procedure. It forces the Contractor in the role of “follower” to just execute what has been stated in the tender specification in accordance with the regulations and conditions that through the specification have been declared applicable. Examples of these regulations and conditions are the UAV 1989 (Dutch: Uniforme Administrative Voorwaarden), steel and concrete standards and inspection requirements.

10.2 Output perspective

In writing this section grateful use is made of an interview with Mr. R.K. Onal MSc, senior consulting engineer at the Dutch Government Building Agency (GBA) and of the MSc thesis report “Innovatief aanbesteden met het Rgd prestatiecontractmodel” (2001) of Mr. M. Reining.

10.2.1 Performance concept

As has also been stated in the previous section, the traditional procurement procedure with its input perspective has been for many years by far the most used procurement route for building projects in the Netherlands. In the 1980s also the concept of thinking in “output” made its entry in the Dutch building sector with the publication of the report “Ontwikkeling prestatiebestek” (1988) by Progresbouw. This report explains the application of the performance concept in developing the tender specification (Dutch: bestek) for the house-building industry in the Netherlands. The motive for this innovative research was a change in the house-building industry from a quantitative to a qualitative demand (critical consumer). This change in demand required a different approach from the supplier side. The nature of the tender specification formed according to Progresbouw the pivot in tuning supply to demand.

Progresbouw expected that the performance concept for the tender specification would improve this tuning and that it would stimulate overall product and productivity improvement in house building. However, the theory of the performance-based tender specification did not have a long existence in practice. Parties in the construction industry

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54 Progresbouw is an association for Contractors and other suppliers in the housing and commercial and industrial building industry. It changed its name in “VG Bouw” (Dutch: Vereniging Grootschalige Bouwondernemen), which merged in June 2002 with “NVOB” (Dutch: Nederlandse Vereniging van Ondernemers in de Bouw) and formed the association “BouwNed”.

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64 Final report – MSc Thesis – Lessons for PFI in the Netherlands
(on both the demand and supply side) did not take over this performance concept. They preferred to hold on to the conversant traditional procurement procedure and Contractors were adverse to respond in the procurement stage according to the developed format set up as part of the performance concept. The Contractors’ attitude is curious, as Progresbouw is an association for Contractors and other suppliers in the housing and commercial and industrial building industry (see footnote 54).

10.2.2 Performance contract model

The Dutch Government Building Agency (GBA) (Dutch: Rijksgebouwendienst)\textsuperscript{55} developed the so-called performance contract model in the early 1990s. The GBA initiated during the years from 1991 to 1996 several public building projects (tax-collector’s offices, court houses and prisons) with a total contract value of about 800 million euros that were procured on the basis of the performance contract model. During those years, this model was constantly in development and the results were published by the GBA in several reports\textsuperscript{56}.

These reports enunciate that working with the contract model and specifically with the performance specification (in other words: focussing on output) is a means to have a better grasp of the building costs and quality than is possible in the traditional procurement route (focussing on input). This attention for control of costs and quality was related to the need for improvement in the tuning of the housing need of governmental organisations to available means to satisfy the housing demand. A comparison can be made with the developments in the house-building industry in the 1980s.

The main reason for developing this contract model, however, was a financial one. The GBA had to attract private finance in order to realise the above-mentioned (high-priority) building projects, because it had no sufficient funds available. Financial institutions were willing to fund these projects, but to safeguard their investment they required to be informed about the project characteristics (building size, number of users, comfort, operational aspects as energy consumption and maintenance costs etcetera). As a result of this, the GBA developed the performance contract model with the performance specification as instrument to indicate the requirements on the basis of which a long-term lease contract could be closed with financial institutions.

The GBA initiated the development of the performance contract model, because this model was necessary to execute the above-mentioned projects. When the model was applied in practice, it became widely known among involved parties (consultants, Contractors). As a consequence, the research institute “Stichting Bouw Research” (SBR) studied the contract model and developed in co-operation with the GBA and VG Bouw the so-called “performance principle”. This principle can be regarded as the theoretical basis of the practical performance contract model, in which experiences of the GBA and VG Bouw were integrated.

\textsuperscript{55} The Dutch GBA provides accommodation for government departments, independent administrative bodies and international organisations. The real estate portfolio of the GBA is extremely diverse: it ranges from office buildings to laboratories, from ranches to palaces and from prisons to museums.

\textsuperscript{56} Examples of reports are: “Het Rgd-prestatiecontract in vastgoedontwikkeling” (1993) and “Werken met prestatiecontracten bij vastgoedontwikkeling” (1995).
In this principle, the demander (Employer) and supplier (Contractor) of accommodation both enter into a contract for the realisation of a project:
- As early as possible in the design process;
- In which the design and construction stages of the project are integrated as much as possible;
- With a specification included in the contract of the required quality (output) as much as possible in terms of functional, spatial and technical performance requirements;
- With a small involvement of the demander in the construction stage.

10.2.3 Obstacles in the application of the contract model

A number of objectives of the GBA were realised in the application of the performance contract model, such as improving the value-cost ratio of projects and a lowering of the transaction costs for the GBA. However, a number of obstacles arose in practice, that were also found in various research studies and evaluations \( ^{57} \).

A major obstacle formed the unacquaintance of parties in the construction industry with the model. It required a considerable effort to leave the familiar traditional way of working and to make the decision to work with the performance model. Only by working with the model, experience and adequate knowledge can be gained. Apart from this, other obstacles related to the following aspects:
- The changing of the roles of (and co-operation between) the actors (Employer, Contractor, Architect) in the building process in comparison with the traditional model;
- The lacking of a good juridical and organisational framework for contracts on the basis of performance specifications in Dutch regulations and standards. All existing Dutch regulations, such as the SR 1997 (Dutch: Standaardvoorwaarden Rechtsverhouding opdrachtgever-architect), the RVOI (Dutch: Regeling van de Verhouding tussen Opdrachtgever en adviserend Ingenieursbureau), the UAV 1989 (Dutch: Uniforme Administratieve Voorwaarden) and the UAR (Dutch: Uniform Aanbestedings Reglement) all refer to the traditional form of collaboration in the construction industry;
- The administrative responsibilities of the GBA as governmental agency. This implies that it has to give account of the spending of public money. As a consequence, it needs (in the application of the performance contract model) to provide for a well-substantiated explanation in case not a choice is made for the tenderer with the lowest price, as is the situation in traditional procurement.

Although the theoretical performance principle has received much attention by the SBR, the above-mentioned obstacles have prevented a wide practical application of the performance contract model in the Netherlands. Moreover, from the mid 1990s, when pressure on public funds decreased, the model did not have much potential for application by the GBA anymore. Today, the performance contract model is not used anymore by the GBA. The performance specification that was developed for this model, however, is still used in projects that the GBA initiates. The reason is that this specification has appeared to be a very adequate instrument to describe the users’

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57 Examples of research studies and evaluations are: Berenschot: "Prestatiecontracten met de Rijksgebouwendienst Een eerste evaluatie van het proces" (August 1995); Drs. H.A.J. Neerhof, TU Twente: "Besturingsrisico's bij het werken met prestatie-specificaties en prestatiecontracten" (November 1995); Ir. K.I. Ang: "Tender nieuwstricht Rgd (March 1997) and Symposium: "Performance tendering, an application of the performance concept in building (March 1997)"
demand. Therefore, these specifications have been further developed for tax-collector's offices and (recently) for court houses. But they are also used by the GBA for other forms of accommodation.

These projects are primarily procured traditionally, in which the Employer employs an architect (and other consultants) to execute the design work. The performance specification forms the main starting point for the design. During the design process the design is tested for compliance with the (functional, spatial and technical) requirements in the performance specification. The products of the design process eventually are tender drawings and specification (Dutch: bestek en tekeningen) on the basis of which a contract is closed with a Contractor to execute the construction works. Important to notice in this respect is that the tender drawings and specification form the juridical basis for the construction works and not the performance specification.
11 Output in PFI

11.1 Output specification

As in the performance contract model, also in the PFI procurement procedure a focus on “output” plays a central role. As has been described in section 10.1, in traditional procurement, the public sector provides the Contractor clear, unequivocal and complete tender specifications that specify what needs to be constructed, what products or materials ought to be applied and under which regulations and conditions the construction works need to be executed (input terms).

The public sector (as Employer) is in PFI concerned with the specification of the performances or services it wants to receive from the private sector. The requirements of the public sector are therefore specified in “output” terms in a so-called output specification. So what the public sector wants to have as result is described in output terms, as opposed to input terms (mentioned above). So the emphasis is laid on the service to be delivered rather than on the product. How the service is to be delivered is nevertheless a matter for the private sector to determine. The output specification forms an essential part of the PFI contract. On the basis of this specification a public authority will enter into a long-term agreement with a private consortium.

The following example illustrates the character of output terms in an output specification.

Example concerning hard FM (Building services – Mechanical installations)

Required outcome (introduction):
“Provision, operation and maintenance of effective heating and ventilation systems, hot and cold water supplies, drainage, gas and compressed air installations and lifts where appropriate, must meet the performance criteria set out in this Output Specification.”

Performance criteria regarding “ventilation”:
- General: “All methods of ventilation must be integrated into the building whether natural, passive or mechanical and co-ordinated with fire alarms where required. The systems must be flexible to allow ventilation rates with low occupancy or out of normal hours use.”
- Specific: Requirements are specified per room in the building (method, cooling, amount of fresh air required, set point temperature, etcetera).

Performance criteria regarding “lighting”:
- General: The SPV must provide adequate lighting for various activities or situations. Maximum use of daylight shall be a priority. Lighting shall be designed to suit specific tasks or multi task areas.”
- Specific: Requirements are specified per room in the building (luminaires, lighting level, control method, occupancy, etcetera).
Innovation

In contrast to a detailed tender specification in traditional procurement, an output specification is often asserted to provide tendering consortia opportunities to utilize its innovative skills in the determination process of how to meet the performance standards in the output specification.

In practice, however, tendering consortia tend to achieve the output requirements by utilising design and operational solutions that are proven and trusted in terms of technology and approach. The reason for this paradox is the involvement of private finance in PFI. In case a consortium proposes a leading edge, but unproven design solution in the procurement procedure of a PFI project, a financial institution (provider of debt) will then view the project as one that bears additional risk. This causes the financial institution either to offer less attractive interest rates on the debt or, alternatively, to incorporate so-called extra contingency risk money into the project’s financial model. This makes the consortium’s tender-offer less competitive.

Only in case a procuring authority would be willing to accept any additional costs in return for innovative design solutions, a decision can be taken by a consortium to start or continue with an innovative strategy in developing a tender-offer. Consortia are generally only prepared to innovate when the reward is there. Not surprisingly, a procuring authority mostly is not willing to spend extra money for innovation (cost is a determining factor) and as a result tendering consortia revert back to tested solutions.

The trick is obviously to develop innovative design and operational solutions that cost relatively little, offer genuine improvement to the Employer and which financial institutions do not regard as risky. These are however difficult to produce.

11.1.1 Asset spec and FM spec

The output specification of a public building can constitute of two components: on the one hand the specification with regard to the building (asset spec) and on the other hand specification regarding hard/soft FM (FM spec). The following example is given to clarify this point.

In a PFI project, the asset spec states in general that all meeting rooms in the accommodation shall have a minimum occupancy of 10 persons and be flexible in usage. Furthermore, the FM spec concerning these meeting rooms states among other things that the temperature shall be maintained at 22°C (+/- 3°C) during core hours and that provisions shall be made for the purpose of electronic data transfer (intranet/internet).

The reason for this separation is that the parties forming the SPV dealing with construction on the one hand and FM on the other hand are predominantly different (and thus have separate sub-contracts with the SPV). As a result, it would not be practical to intertwine these specifications. Moreover, usually the specifications regarding the hard/soft FM are also separated, for the same reason.

What is very important and has appeared to be difficult in English PFI practice is the interface between the asset and FM spec: in the design work the plans of a Contractor

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58 Mr. M. Delap (Director), Gardiner & Theobald Management Services (London)
59 Mr. M. Coleman (PFI Project Director), Focus Education, Bovis Lend Lease
regarding the fulfilment of the FM spec need to match the plans to fulfil the asset spec. The objective is to avoid the situation that an accommodation is being built according to the asset spec, but after delivery of the construction works it appears that services cannot be delivered in accordance with the FM spec. Interface problems could result in disputes between the involved Contractors. To smooth the settlement of these disputes, the so-called interface agreement can be put in place in PFI contracts. See section 4.6 for treatment of the interface agreement.

The FM spec is set up in such a way that so-called performance indicators are identified, which are used to monitor against. Examples of performance indicators might be:
Regarding MEP (Mechanical, Electrical and Plumbing):
- Continuous, safe electrical power at all outlets;
- Continuous supply of hot, cold, chilled and potable water at all times;
Regarding security:
- Prevent unauthorised access at all times;
- Identify, authorise and handover visitors in accordance with procedures;
Regarding cleaning:
- Office equipment free of dust, grime, marks and static;
- All areas comply with health and hygiene regulations;

11.1.2 Agreed procedures

Obviously, the output specification is rather abstract, or vague. For the benefit of both the Employer and the SPV a series of procedures are produced as part of the PFI contract in response to the output specification. These procedures are agreed between all involved parties before contract signature and give the interpretation of what the output specification is actually meaning and in this way it links to the performance indicators.

The agreed procedures in essence have three functions:
- Firstly, the agreed procedures inform the Employer, starting purely from the output specification, how the SPV is expecting to deliver the requested performances and how it plans to cover the risks that it has taken onboard (risk management). Furthermore, the Employer can make sure that the Contractors pick up their responsibilities in the area of for example environment, health and safety and that they confirm to statutory obligations.
- In the second place, the agreed procedures give the private sector through the method statement, which is part of the procedures, the freedom to determine how they are planning to deliver hard/ soft services. During the operational period of the contract, all the services have to be delivered in accordance with this method statement.
- In conclusion, the agreed procedures are an important tool in managing expectations in PFI projects. To clarify this, an example is given regarding the number of security guards at the entrances of a building. Say the output specification of a PFI project states:

"Unauthorized access into the building shall be prevented at all times"

Obviously, there are several ways to fulfil this output specification. From the security sub-Contractor’s perspective, it would be best to shut all the entrance doors of the building and only open them when somebody turns up. Through this way of working, he minimizes the number of guards that need to be present on site to fulfil the output
specification. Understandably, this can never be the intention of the Employer. So the method statement, as part of the agreed procedures, forms in this example an agreement between the Employer and security sub-Contractor regarding the number and positioning of the guards on site. It creates a balance between on the one hand the way in which sub-Contractors satisfy the output specification and on the other hand the expectations of the Employer. As Mr. Julian Daniel, former construction director of the HM Treasury project, has stated in an interview: by managing expectations, “the Employer is not expecting a Rolls Royce and the subContractors are not going to give him a Smart car, it’s actually a Volvo.”
Part 3: Description of case projects
12 Case projects

This chapter gives a brief description of the 3 English and 2 Dutch PFI public building projects that encompassed the case study research. Interviews have been conducted at these projects with representatives of involved parties to serve the research question of this thesis. See appendix D for the list with interviewed persons.

12.1 Government Offices Great George Street project

This section gives an overview of the Government Offices Great George Street (GOGGS) renovation project. After the project facts, the history of GOGGS is discussed. Following this, the motives for the project are described and the organisation of the private consortium Exchequer Partnership is explained.

12.1.1 Project facts

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<thead>
<tr>
<th>Employer</th>
<th>Total capital costs (incl. of VAT)</th>
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</thead>
<tbody>
<tr>
<td>Phase 1: HM Treasury</td>
<td>Phase 1: £ 112 million (€ 168 million)</td>
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<tr>
<td>Phase 2: HM Customs &amp; Inland Revenues (HM Treasury is the owner of GOGGS)</td>
<td>Phase 2: £ 148 million (€ 222 million)</td>
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<tr>
<td>(HM Treasury is the owner of GOGGS)</td>
<td>Total contract value (NPV): XXX</td>
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</table>

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<th>SPV</th>
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</thead>
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<td>Phase 1: May 2000</td>
</tr>
<tr>
<td>Phase 1: Exchequer Partnership 1, comprising of Bovis Lend Lease, Stanhope and Chesterton Int</td>
<td>Phase 2: January 2003</td>
</tr>
<tr>
<td>Phase 2: Exchequer Partnership 2, comprising of Bovis Lend Lease and Stanhope</td>
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<table>
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<th>Architect</th>
<th>Contract term:</th>
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<tbody>
<tr>
<td>Foster &amp; Partners (Lead architect)</td>
<td>35 years (both phases)</td>
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<table>
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<tr>
<th>Date of service commencement</th>
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<tr>
<td>Phase 1: July 2002</td>
<td></td>
</tr>
<tr>
<td>Phase 2: November 2004</td>
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Reception of HM Treasury, after accomplishment of the renovation works in August 2002
12.1.2 General information

Today, Government Offices Great George Street (GOGGS) houses both the Treasury (western side) and Customs & Revenues (eastern side) departments. From 1940 to 2002 the complete building used to house the Treasury department. GOGGS was designed in 1898 by the Scottish architect John McKeen Brydon and is regarded as an important part of the British Government’s freehold estate. See figure 12.1 for a map with the location of GOGGS in the heart of Westminster, London and figure 12.2 for a recent aerial photo of this building.

Figure 12.1: Map with location of Government Offices Great George Street (GOGGS)

Figure 12.2: Aerial photo of Government Offices Great George Street (GOGGS)

Because of a protracted and laborious acquisition of land, GOGGS was built in two distinct phases between 1900 and 1917. After delivery, the building was regarded as one of the most important new public buildings in London. Only in 1970, GOGGS received
official recognition for its historical and architectural significance when it became Grade II* listed. This listing placed the building in the top 10 per cent of all listed buildings in the United Kingdom (UK) in terms of importance.

Motives
By the early 1990s, after many years during which only essential maintenance work had been undertaken, it became clear that the fabric of the building required extensive remedial work. Furthermore, the outdated building services and the internal configuration of the building, which comprised of cellular offices located along long corridors with very little open plan space, contributed to the need for refurbishment. This would address the long-term maintenance backlog and, by improving the internal layout of the building, would provide for modern, flexible and efficient office space.

The GOGGS renovation project was carried out in two phases. The first, which was completed in July 2002, has transformed the western half of the building and is since completion occupied by 1200 staff of the Treasury department. The second phase is delivered in November 2004 and houses since then 1575 staff of the department of Customs & Revenues (C&R), see figure 12.3. Although it was clear from the start of the negotiations to renovate the complete building by making use of the PFI procurement procedure, the project for the eastern end was agreed in August 2002 and reached financial close in January 2003.

![Figure 12.3: Schematisation of the GOGGS building with the completion dates of the phases](image)

12.1.3 Exchequer Partnership
The Treasury undertook a competitive procurement process to select a private sector partner (consortium) to refurbish the full GOGGS building (east and west) and then maintain and service it for a period of 35 years. In September 1996, Exchequer Partnership (EP) was selected as the preferred tenderer for the project.

By the time key terms of the deal had been agreed, final negotiations between the Treasury and EP were terminated. This was the result of a change of government following the General Election in 1997. The new Labour Government decided that it was inappropriate to go ahead with this major, high value project at a time when all departments had to review their spending plans. After the termination of the negotiations, the Treasury executed a review in order to assess the priority of the project in relation to other expenditure demands. The review confirmed that the building was in great need of a major renovation. On this basis, ministers agreed that the project should go ahead. The Treasury decided to retain EP as its preferred tenderer and not to hold a second competition for the entire project. As a result, negotiations resumed in October 1998 and the contract was signed in May 2000 (financial close).
For the first phase, EP comprised of the equity partners Bovis Lend Lease, Stanhope and Chesterton International. However, due to financial difficulties, Chesterton sold its (non-core) facilities management division and stepped out of EP in December 2003 and sold its equity share proportionally to Bovis Lend lease and Stanhope. Johnson Service Group took over the tasks of Chesterton International in November 2003, but without being an equity shareholder in EP. As a result of this, a distinction is made between the equity partners of Exchequer Partnership in phase 1 (EP1) and in phase 2 (EP2), see figure 12.4.

Figure 12.4: Structure of EP1 (phase 1) and EP2 (phase 2), including the equity share between the partners
12.2  Lincolnshire Grouped Schools project

This section describes the Lincolnshire Grouped Schools project. After an overview of the project facts in the first subsection, the motives for and elements of the project are discussed in subsection 2. In conclusion, the third subsection describes the private consortium Focus Education.

12.2.1  Project facts

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<th>Employer</th>
<th>Total capital costs (incl. of VAT)</th>
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<tbody>
<tr>
<td>Lincolnshire County Council</td>
<td>£ 14 million (£ 21 million)</td>
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<tr>
<td>SPV</td>
<td>Total contract value (NPV): £ 87 million</td>
</tr>
<tr>
<td>Focus Education, comprising of</td>
<td>Date of contract signature (fin. close)</td>
</tr>
<tr>
<td>Lend Lease and Bank of Scotland</td>
<td>September 2001</td>
</tr>
<tr>
<td>Architect</td>
<td>Contract term</td>
</tr>
<tr>
<td>Watkins Gray International LLP</td>
<td>30 years</td>
</tr>
</tbody>
</table>

Subprojects
- Mainstream:
  - New primary school in Lincoln (Capacity: 420 pupils, opened in January 2003)
  - New (specialist ICT) primary school in Sleaford (Capacity: 420 pupils, opened in September 2002)
  - New primary school in Claypole (Capacity: 150 pupils, opened in March 2003)
- Specialist:
  - New primary school for EBD children in Lincoln (Capacity: 50 pupils, opened in September 2003)
  - New sec. school for EBD children in Grantham (Capacity: 60 pupils, opened in September 2003)
  - New sec. school for EBD children in Spilsby (Capacity: 60 pupils, opened in September 2003)
  - New sec. school for EBD children in Lincoln (Capacity: 45 pupils, will open in 2005)

12.2.2  General information

The Lincolnshire schools project was set up to address shortcomings indicating that there is need for:
- Accommodating a growing population in areas of the county where school provision is insufficient in capacity and primary school pupils are having to be transported out of their home areas;
- Finding ways to address the social inclusion policy objectives with regard to children with emotional and behavioural difficulties (EBD) and to address the underprovision in suitable facilities and the high levels of out-of-county placements;
- Raising quality standard of education accommodation (buildings);
- Improving communication in the rural community of Lincolnshire by stimulating the widespread use of information and communication technology (ICT).

Providing for the aspiration of addressing communicational problems in the county may be beyond the scope of the PFI schools project, which is essentially focused on
educational aspects. However, the application of ICT in such a project offers an opportunity to contribute to the fulfilment of the policy to address rural problems through incorporating the use of ICT in school design.

The project comprises of the following subprojects:
- New primary school in Sleaford, Lincoln and Claypole;
- New primary and three new secondary schools for children with emotional and behavioural difficulties (EBD).

See figure 12.5 for an aerial view of the new St. Botolph’s Church of England Primary School in Sleaford.

![Aerial view of the new St. Botolph’s Primary School](image)

Figure 12.5: Aerial view of the new St. Botolph’s Primary School (Sleaford)

12.2.3 Focus Education

In September 2001, the private consortium "Focus Education" signed with the Lincolnshire County Council a contract to design, build, finance, maintain and operate a group of seven schools for a period of 30 years. The consortium will provide for ancillary (non-educational) services, such as maintenance, cleaning and catering.

Focus Education comprises of Lend lease and Bank of Scotland. Lend lease is responsible for the hard/ soft facilities management (FM) services. The design and construction had been contracted out to Bovis Lend Lease, the construction arm of Lend Lease. Lend Lease and Bank of Scotland provide equity capital in equal proportions, therefore they are equal shareholders in the SPV. This is indicated in figure 12.6. The majority of the financing (debt) is provided by Halifax Project Investments. In September 2001, Bank of Scotland merged with Halifax and formed HBOS.

![Focus Education Diagram](image)

Figure 12.6: Structure of Focus Education, including the equity share between the partners
12.3 Worcestershire Royal Hospital project

This section discusses the Worcestershire Royal Hospital project. After an overview of the project facts and the introduction to the project, the motives are described. In conclusion, the organisation of the private consortium Catalyst Healthcare is explained.

12.3.1 Project facts

<table>
<thead>
<tr>
<th>Employer</th>
<th>Worcester Royal Infirmary NHS Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPV</td>
<td>Catalyst Healthcare (Worcester), comprising of Bovis, RCO Support Services, Bank of Scotland and Société Générale</td>
</tr>
<tr>
<td>Architect</td>
<td>RTKL</td>
</tr>
<tr>
<td>Date of service commencement</td>
<td>January 2002</td>
</tr>
<tr>
<td>Total capital costs (incl. of VAT)</td>
<td>£ 112 million (€ 168 million)</td>
</tr>
<tr>
<td>Date of contract signature (fin. close)</td>
<td>March 1999</td>
</tr>
<tr>
<td>Contract term</td>
<td>30 years</td>
</tr>
</tbody>
</table>

12.3.2 General information

The new hospital provides for 452 beds and includes special features such as 8 operating theatres, an Accident & Emergency department as well as a Critical Care unit. It is built on a greenfield site adjacent to the existing Royal Worcester Infirmary. Construction of the hospital started in May 1999 and the project was completed in January 2002. See figure 12.7 on the next page for an aerial overview of the hospital under construction.

Motives

Before the realisation of the Worcestershire Royal Hospital project, hospital services for the population in the south of the Worcestershire County were scattered between three different sites in Worcester. These range from a hospital in the centre of Worcester, which was first occupied in 1770, and a Canadian war hospital (from the early 1940s) to more modern buildings, which were completed in 1978.

Besides the fact that these outdated buildings were inefficiently organised and required a high level of maintenance, the sharing of hospital services between three separate sites created significant organisational issues. Examples of these issues are:

- Regular necessity for transfer of seriously ill patients between sites;
- Providing medical staff in order to cover all sites 24 hours per day;
- Duplication of both staff and equipment.

These issues made the necessity for a new, single site hospital, which replaces the three existing hospitals, indisputable.
12.3.3 Catalyst Healthcare (Worcester)

In September 1996, Catalyst Healthcare (Worcester) was selected as preferred tenderer by the Worcester Royal Infirmary NHS Trust to execute the project that comprised the design, construction, funding and maintenance of the hospital and the provision of non-clinical services for a period of 30 years.

To pursue opportunities in the PFI healthcare market, the companies Bovis\textsuperscript{60}, RCO Support Services and Bank of Scotland created the private consortium Catalyst Healthcare in 1995. Following the financial contract closure in March 1999, the special purpose vehicle (SPV) Catalyst Healthcare (Worcester) was formed to finance and deliver the hospital project in Worcester. This was the second project of Catalyst Healthcare; the first was a similar hospital project in Calderdale.

In Catalyst Healthcare (Worcester), Bovis owns 50% of the equity capital, while RCO Support Services, Bank of Scotland and Société Générale each hold 1/3 of the remaining 50% (see figure 12.8).

![Diagram: Structure of Catalyst Healthcare (Worcester), including the equity share between the partners]

Figure 12.8: Structure of Catalyst Healthcare (Worcester), including the equity share between the partners

Following the financial close of the Worcester hospital project, the Catalyst sponsors set up the company Catalyst Healthcare Management to provide project management services to both of the hospital projects (Calderdale and Worcester).

\textsuperscript{60} Bovis merged with Lend Lease after completion of the Bluewater project (retail & leisure) in 1999.
12.4 Montaigne Lyceum project

This section gives an overview of the Montaigne Lyceum new build project, which is the first PFI public building project in the Netherlands. This project is therefore assigned the pilot status. After the project facts and some general information on the project, the organisation of the private consortium TalentGroep is explained.

12.4.1 Project facts

<table>
<thead>
<tr>
<th>Employer</th>
<th>Total contract value (NPV, excl. VAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipality of The Hague (juridical Employer) and SCO Lucas school board</td>
<td>€ 17 million</td>
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</table>

<table>
<thead>
<tr>
<th>SPV</th>
<th>Date of contract signature (fin. close)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TalentGroep, comprising of Strukton, Intech and ISS</td>
<td>December 2004</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect</th>
<th>Contract term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rau &amp; Partners</td>
<td>30 years</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Date of service commencement</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2006 (expected)</td>
</tr>
</tbody>
</table>

12.4.2 General information

In 1999, the school board “Stichting Confessioneel Onderwijs Lucas” (SCO Lucas) and the municipality of The Hague came into contact with the PPP Knowledge Centre with the aim to develop a new school in The Hague. This new school, named Montaigne Lyceum, forms part of the educational plan of the municipality of The Hague as a response to the growing need for educational services in the “Vinex” area of Ypenburg.

The secondary school Montaigne Lyceum was founded in 2001 and had in the beginning of 2004 an occupation of about 250 pupils. The school is since then housed in temporary accommodation and the plan is to move to the new school building in August 2006. By the time the moving takes place, the total number of pupils is expected to have passed the 600. The new school building, of which the construction started in May 2005, will have a capacity to provide education to a total of 1200 pupils.

The Montaigne Lyceum will provide for so-called learn domains, which are spaces in which pupils can work individually and in groups, and work domains for the gaining of practical skills. The building will furthermore have an atelier for visual and creative training, a 200-seat theatre, studios for music and dance, 3 gyms and a laboratory that has a capacity of 80 pupils.

See figure 12.9 on the next page for an aerial impression of the future Montaigne Lyceum building.
12.4.3 TalentGroep

In December 2004, the private consortium “TalentGroep” signed with the municipality of The Hague a contract to design, build, finance, maintain and operate the Montaigne Lyceum for a period of 30 years. TalentGroep is a for the Netherlands unique collaboration (Dutch: samenwerkingsverband) comprising of Strukton (Contractor), Imtech (hard FM) and ISS (soft FM). During the operational period of the contract these companies will provide for ancillary, non-educational services, such as (life-cycle) maintenance, cleaning, catering and reprography (both optional).
12.5 Ministry of Finance project

This section describes briefly the Ministry of Finance renovation project. After the project facts, some general information on the project is given.

12.5.1 Project facts

<table>
<thead>
<tr>
<th>Employer</th>
<th>Total contract value (NPV, excl. VAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Finance (procuring authority: Government Buildings Agency)</td>
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<table>
<thead>
<tr>
<th>SPV</th>
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<tbody>
<tr>
<td>Up to date unknown</td>
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</table>

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<thead>
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<tbody>
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<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2008 (expected)</td>
<td></td>
</tr>
</tbody>
</table>

12.5.2 General information

The renovation project of the headquarters of the Ministry of Finance in The Hague is the first government building project in the Netherlands that is going to be procured according to the PFI procedure. All stages of the building process, from the design, construction and maintenance to operation of soft FM services will be procured, including finance, into one contract. The project is therefore by the Dutch government considered as pilot project, as the Montaigne Lyceum project.

The ministry building was designed by the Government architect (Dutch: Rijksbouwmeester) Mr. J. Vegter and the Government Buildings Agency (Dutch: Rijksgebouwendienst) architect Mr. M. Bolten. The building was opened in 1975 and is characterised by the massive use of concrete in the façade. Also in the interior, especially in the public areas, much concrete is applied. The architecture of the ministry building is therefore rated as "brutalism".

Motives

The primary motive for the renovation of the ministry building is the out-dated climate installation. It became clear in May 2001 that the continuing problems with this installation could not be solved with limited works. A research of the Government Buildings Agency concluded that the functioning of the installations could not be guaranteed anymore after 2006 and had to be renewed. A research conducted by the Dutch knowledge organisation TNO confirmed this conclusion. As the installation is intertwined with the façade of the building, a radical approach is necessary (stripping of the complete building). The Ministry of Finance therefore decided to renovate the complete building so that also other shortcomings can be addressed. In the beginning of 2003 is decided take the PFI (or DBFMO) route for the renovation project.
State of the project

The Government Buildings Agency (procuring authority) and Ministry of Finance (Employer) have selected in August 2005 two of the three Dutch private consortia on the basis of their tender-offers. Negotiations about these offers and contract are taking place at the moment of finalisation of this report. After completion of these negotiations, the remaining two consortia are invited to make a Best and Final Offer. The plan is to come to financial contract closure in spring 2006 after which the renovation starts.
Part 4: Analysis
13 Contextual differences

Before discussing aspects of special consideration that result from the case study research, three contextual differences between England and the Netherlands effecting the construction industry in general and building projects in particular are discussed. The differences relate to the legal system, consultation and strive for consensus (cultural differences) and fraud in the Dutch construction industry. These contextual differences are of interest for the application of the English PFI model in the Netherlands.

13.1 Legal system

The English and Dutch legal systems are different in that in the English Common Law is developed from precedents (or jurisprudence) and the Dutch Civil Law is based on abstract, general holding legal rules, as has been explained in appendix B. They represent two ways of legal thinking: whereas in Civil Law jurists primarily ask themselves what stipulation is applicable on the law case in question, the Common Law jurist checks whether there has been a judgement on a similar case in the past (precedent) and what the characteristics of that judgement were.

The Common Law in its narrow sense of "strict" case law plays a leading role in the English legal system. In other words, the English judge primarily concentrates on the facts and objective aspects of a law case. This means that in Law of Obligations (Dutch: Verbintenissenrecht) an English judge formulates his verdict on the basis of the "letter" of the contract. It must be said, however, that these days in practice frequently also the context of a law case and the probable consequences of a verdict are considered by an English judge (see also appendix C). In response to the fairly objective approach, parties in England take ample time to write a contract. This great attention for the contents of a contract is reflected in its size and in the expenditures for legal consultancy, which both can take enormous proportions. In the Netherlands, however, contracts are normally written in a much shorter time period in which less attention is devoted to the contents. This results from mutual trust, the idea that the exact contractual situation will become clear over the project and the rely on the principle of reasonableness and fairness in case a dispute exists and it is taken to court (see also appendix C).

Contracts in the PFI procurement procedure are naturally very comprehensive and complex, because a range of different aspects need to be covered for a long term time period between the procuring authority and a private consortium as well as among the various Contractors of the consortium. Some examples of these aspects are:

- Service requirements and availability terms;
- Performance monitoring;
- Payment mechanism (including indexation, market testing and benchmarking);
- Change procedures;
- Termination of the contract and dispute resolution.

61 Experiences of Mr. D.C. Orobio de Castro, lawyer at lawyer’s office “Stibbe”, Amsterdam
Because of this complexity, procuring authorities and also private consortia have to face a high level of legal fees during the PFI process. Legal fees are actually the major cause of high tender costs in PFI, notwithstanding the standardisation efforts of the British government (as has been explained in section 4.7).

The PFI contract is especially developed in England, where the procurement procedure was introduced in 1992 (see section 4.1). Its structure is therefore shaped in the English Common Law in which no clear framework exists for contracts as is present in Dutch law. Because of its complexity and the novelty of the PFI model in the Netherlands, the Common Law contracts have been used in large measure as model for the first Dutch PFI contracts. These contracts had as a consequence the structure and size of a contract formed under Common Law, though they were formally written under Dutch law. In recent PFI projects in the Netherlands the procuring authorities have tried to develop the contracts in more accordance with Dutch law, but the Common Law influence is still present.  

The “English-like” attention for the contents of Dutch PFI contracts does not only result from the complexity and novelty of the PFI model. Important to note in this respect is also that Dutch judges generally tend to apply a fairly objective approach in case of complex contractual law cases. This means that they tend to hold on to the letter of the contract as their English colleagues, notwithstanding the fact that the principle of reasonableness and fairness plays an important role in the Dutch legal system (see appendix C). Complex contractual law cases could result from disputes between parties involved in a PFI project. The reason for this approach is that in a complex law case the judge may not be able to take stock of the case completely and finds it difficult to fully comprehend the context in which the case takes place. Legal consultants do therefore also well by PFI contracts in the Netherlands despite of the theoretical major differences in how the English and Dutch judges approach contractual law cases.

13.2 Consultation and strive for consensus

In the Netherlands developed after the second World War a “consultation economy” (Dutch: overlegeconomie) that was characterised by frequent consultation and the strive for consensus between the government and labour organisations. The consultation concerned social-economic subjects such as wage development. The strive for consensus increased the influence of labour organisations (representing employees as well as employers) on social-economic decision-making and the organisation of the Dutch welfare state. In the mid 1990s the consultation economy was reformed and became known as the “polder model”.  

The polder model actually has a much broader meaning than just the consultation and the strive for consensus between the government and labour organisations. It encompasses consultation and the strive for consensus between all sorts of social groups and organisations as a way to agree on issues. In other words, it is part of the Dutch culture.

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62 DBFM-Handboek – Een verkenning van DBFM contract onderdelen (April 2005), published by the Dutch PPP Knowledge Centre
63 Experiences of Mr. D.C. Orobio de Castro, lawyer at lawyer's office “Stibbe”, Amsterdam
64 www.parlement.com
This statement is supported by the next quotation of Mr. J. Lending in his book “Polderdenken. De wortels van de Nederlandse overlegcultuur” (2005):

“Het streven naar consensus is Nederlanders zo dierbaar dat ze er nooit afscheid van zullen nemen. Het einde van de overlegcultuur zou per slot van rekening niets anders zijn dan het einde van de Nederlandse identiteit.” (Dutch)

Direct translation in English:

“The strive for consensus is Dutch people so dearly beloved that they will never say goodbye to it. The end of the consultation culture would eventually be nothing else then the end of the Dutch identity.”

The polder model gained international renown and became an exemplar model for other European countries, including England. The model proved that, different from the situation in other countries, no hostility has to exist among labour organisations and between these organisations and the government in order to come to for all parties satisfying agreements regarding terms of employment and social-economic policy. Despite the good intentions of the model, there is also criticism. This primarily refers to the issue that the consultation culture and the strive for consensus makes the decision-making process very lengthy, which makes it difficult to make radical decisions.

The above described “polder” culture in the Netherlands makes it plausible that it is in the Netherlands more self-evident than in England to consult from the beginning of a civil engineering project all parties that have an interest in the project. Examples of these parties are public sector employees (such as medical staff) and consumers of the public services (such as patients).

13.3 Fraud in the Dutch construction industry

The Dutch public sector was in November 2001 startled by possible extensive fraudulent activities in the construction industry, such as bribery (Dutch: omkoping), forgery (Dutch: valsheid in geschrifte) and fiscal fraud. This was revealed by the Dutch television programme “Zembla”. Contractors would seem to be making illegal price-agreements and to have a system to settle tender costs mutually. In the construction industry furthermore an extensive “black money” circuit was presumed to exist at the expense of the Employer who was systematically being overcharged.

As a result of this programme a temporary research committee was established that advised the government to set up a Parliamentary Inquiry Committee to investigate the construction industry. The Committee started its research in February 2002, in which the emphasis was laid on the determination of the nature and size of the irregularities and the role of the parties involved in the construction industry.

The Parliamentary Inquiry Committee concluded in their final report among others that extensive fraudulent activities had taken place in the Dutch construction industry, in particular in road and water construction works. Over 600 Contractors systematically made mutual price-agreements and divided market share, against the rules set by the European Committee. It was calculated that the public sector was overcharged for 8,8 per cent on average. The activities also resulted in a decrease of competition and technological innovation.
The Dutch Public Prosecution Service (Dutch: Openbaar Ministerie, OM) started in pursuance of these conclusions criminal research that concentrated on corrupt civil servants and fraudulent Contractors. Early 2004, the Service prosecuted 7 civil servants and brought in October of that year 4 Contractors and 12 senior executives to court. The Dutch Competition Authority (Dutch: Nederlandse Mededingingsautoriteit, NMa), which observes fair competition in all sectors, had furthermore at the end of 2003 and the beginning of 2004 penalised hundreds of Contractors for their role in the fraud.

It can be stated that the fraudulent activities in the Dutch construction industry partly result from the custom of procuring authorities to contract out projects in most cases on the basis of the lowest priced tender-offer. The fraudulent activities are furthermore stimulated by the fact that normally hardly or none (financial) compensation is given for the tender costs made. The English PFI procurement procedure forces procuring authorities to apply other evaluation criteria than just price, such as the economically most advantageous offer. This stimulates tendering consortia to compete on quality as well as on price.

The application of other evaluation criteria than just price in the tender process was one of the recommendations of the Parliamentary Inquiry Committee in case of the contracting out of complicated or innovative projects (such as in PFI). Regarding tender cost compensation, the Committee recommended that in complicated or innovative projects Contractors should be compensated for their tender costs. This, however, is up to the procuring authority to decide.
14 Aspects of special consideration

This chapter explores four particular aspects that need special consideration in PFI public building projects. These aspects are all related to the output-oriented character of PFI. They result from the case study research conducted in England and the Netherlands and may function as lessons for Dutch private and public parties that participate or are planning to participate in future PFI public building projects. Important to note in this respect is that some of these aspects appeared to be lessons for English parties themselves as well.

14.1 User involvement

In considering the aspect of user involvement in the PFI process a distinction is made between the planning stage and procurement procedure of a project, as has been done in chapter 7. Two types of users of a public building can be distinguished:

- The public sector employees that provide the services offered in the building. Examples of these users are civil servants or officials employed at governmental departments, educational and medical staff;
- The so-called "consumers" of public services, such as pupils and patients. The interests of this type of users can be promoted by specific consumer organisations.

In the planning stage the involvement of users in writing the output specification is considered and in the procurement procedure the relationship of users with the consortia's architects.

14.1.1 Planning stage

The importance of user involvement in writing the output specification in the planning stage of a PFI project may not be underestimated. There are several reasons for involving users in drafting the output specification. The following can be mentioned:

- Generally, users are a good source of information regarding weak and strong aspects of the building design and the organisation and quality level of hard/soft FM services. They derive this information from practice and thus it is very valuable;
- By involving users, information regarding the project can be disseminated among them. This can stimulate them to get interested in the project and to start preparing the change in environment that goes with PFI. In a PFI hospital project for example, the medical staff has to co-operate with more people working for the private sector than in the traditional (pre-PFI) situation;
- Through involving users, "ownership" in the project from their part can be created. In the communication with users, the motives for making certain decisions regarding for example performance standards can be clarified. This may contribute to their understanding why not all of their desires can be fulfilled;
Procuring authorities may involve users on a limited scale in developing the output specification due to inexperience and the tight time scale in which the planning stage of a PFI process needs to be passed through. Moreover, users may be perceived as troublesome in the delivery of the output specification, because of the varying views regarding design aspects of the building and/or (the quality of) services that need to be delivered during the operational period of the project.

Consultants
Procuring public authorities generally make, especially when they are inexperienced in PFI, much use of consultants to write the output specification. Broadly seen, the output specification would be theoretically fine in case only consultants are used without any input from users at all. However, as is made clear above, it would be not beneficial to do that. In writing the output specification, the consultant’s role should be preparing a basic (reference) proposal on which users can comment. Such a proposal is necessary, because of two reasons. Firstly, users do not know where to start and, secondly, people naturally tend to go to high standards when they are given a blank piece of paper and they are asked what they would like to change or what they would like to have in for example a new office environment.

If well organised and managed, the involvement of users does not have to lengthen the duration of the development of the output specification. An example of how user involvement in the planning stage of a PFI project can be organised is having a central task force and series of study groups that deal with specific building design and FM issues, such as standard offices, office furniture, the restaurant etcetera (see figure 14.1). For each study group a number of users need to be selected based on their familiarity with the issue to be discussed (for example regarding office space, the following question need to be discussed: what do we want to have/ change in the standard offices?).

![Diagram](image)

**Figure 14.1** Example of organisational structure of user involvement in the planning stage of a PFI project

Any comments from the study groups on the proposed basic output specification need to be reported to the task force, which is responsible for the management of the interfaces between the various aspects of the specification. The task force should ideally comprise of people who are managing the planning stage (procuring authority or consultant) and representatives of the public sector employees and the consumer organisations that know the organisation well and are particularly interested in the project.
The Netherlands

It appears that the importance of user involvement in the planning stage has been recognised in both of the first Dutch PFI building projects. In these projects, users (in the meaning of public sector employees: educational staff and officials) have played a significant role in the development of the output specification. In the planning stage of the Montalgin Lyceum project, the headmaster formed a team with teaching staff. This team developed together with a specialised education consultant a view on the desired education concept on the basis of which the output specification was developed. At the project of the renovation of the Ministry of Finance already a (traditional) spatial and functional list of requirements was developed before the decision for PFI was taken. In the development of this list of requirements employees of the Ministry of Finance had an important input. A project group was founded with representatives of the different departments within the ministry. After the decision was taken to precede the project under PFI, the output specification was derived from the list of requirements. In this process the project group functioned as sounding board.

The attention for the involvement of users in these two projects seems in line with the characteristics of the polder culture in the Netherlands (as described in the previous chapter).

14.1.2 PFI procurement procedure

After finalisation of the planning stage, the formal procurement procedure starts as part of the PFI process. In this stage the tendering consortia materialize the output specification into a design.

User-architect relationship

The relationship between the users of the Employer and architects of the different tendering consortia is very important during this stage. It is essential that this relationship works well. All major spatial, technical and architectural design parameters will be identified and more or less fixed for the rest of the procedure. The users have to “buy into” the solutions offered so that they feel “ownership”. Therefore, the users need to be close to the private consortia’s architects.

Obviously, a strong user – architect relationship is relevant in all types of procurement procedures. In PFI it is generally recognised that this relationship must be formed, but many Employers in England fail to give it enough importance. The consequence could be a disconnect between the users and the architects. In establishing a strong and close relationship from early on in the design period, the contractual baggage (characterising PFI) first needs to get around.

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65 Mr. M. Delap (Director), Gardiner & Theobald Management Services (London)
This point is illustrated in figure 14.2. In this situation the architect (as part of the design team) is contracted by the Design – Build Contractor.

![Diagram showing formal and ideal communication routes between employer, user, SPV, contractor, and architect.]

Figure 14.2: The formal versus ideal communicational route between user and architect

After the Invitation to Tender (ITT) has been issued, up to 4 private consortia could be developing a design in accordance with the output specification. In this stage the Employer has not formed a close relationship with one of the consortia’s architects.

Users have to communicate several times with the architects so that their needs are not compromised in the development of the design. The communication process has to take place for each architect separately, because the tendering consortia all are in competition. This can result in a tiresome and inefficient process for the users, especially when the PFI project concerns an organisation with a large variety of users (hospitals, governmental departments).

The Employer could in my view employ a party in the function of “liaison officer” between the users and consortia’s architects to address these issues. This possibility will be discussed in subsection 14.2.4 of this chapter.
The Netherlands
In both of the Dutch PFI building projects several meetings were organised between the users and consortia’s architects during the tender stage. At the Montaigne Lyceum project, there have been several consultations between the headmaster of the school and the architects. Also at the project of the renovation of the Ministry of Finance consultations have been organised between the users (the project group as mentioned in the previous subsection) and consortia’s architects. Obviously, there is a great difference in the number and variety of users at both projects.

14.2 Design work
The PFI model changes the traditional contractual position of the architect (or design team) in a project. In PFI, the architect works for the private consortium (or SPV) and not for the Employer as in the traditional procurement procedure. See figure 4.5 for the position of the design team in a typical PFI contractual structure. As a consequence, the design work is fully executed under the responsibility of the SPV.

The actual design work in PFI in England normally starts after the Invitation to Tender (ITT) has been issued to the short-listed consortia. See section 7.2 for the position of the ITT as key stage in the PFI procurement procedure. In accordance of this invitation, the consortia prepare a design of which its progress normally can be classified between concept and preliminary design (Dutch: schets en voorlopig ontwerp). In some cases the procuring authority requires a preliminary design. During this design process the major design work is executed, in which the primary parameters of the spatial, technical and architectural plans are identified and more or less fixed. In case of a project involving new building, examples of these parameters are: ground-plan for the building floors and division of the façades (spatial), type of foundation, global dimensioning of bearing structure, principle design of installations and routing of the conduits (technical) and artist’s impressions of the exterior and interior cladding (architectural). Important to note here is that in PFI, more than in the traditional situation, due attention needs to be devoted how to deal with maintenance (life-cycle costs) and operational (hard/soft FM) aspects over the contract term.

After the tender offer is issued, the above-mentioned primary design parameters will not be changed drastically anymore. In the following Best and Final Offer (BaFO) stage the design will not be developed much further, apart from some design optimisation (to improve the value/cost ratio) and processing of Employer’s comments. Until a consortium has reached the preferred tenderer stage, it is unlikely to invest more money and time in the design work, because of the risk of loosing the procurement procedure.

14.2.1 Effective design period
In England, the period of time to prepare the design in accordance with the ITT typically comprises 3 to 4 months.66 When the time required for preparing the commercial tender-offer (end) is subtracted from this, only 2 to 3 months remain for effective design work. See figure 14.3 for an indication of the effective design period in a simplified time schedule of a typical PFI process in England.

This effective design period, in which the main parameters of the design will be fixed (as described above), is short compared to the traditional duration of the design period before

66 Mr. M. Delap (Director), Gardiner & Theobald Management Services (London)
parameter fixation. This may not be troublesome for the tendering consortia, but the negative consequence of the relatively short effective design period in PFI may be that the design work (including maintenance and operational aspects) is not thoroughly thought-out and/or not in optimal compliance with the Employer's output specification.

The following quotation of Mr. R. Feilden, joint founder of the architect's office Feilden Clegg Bradley, is illustrative in this respect:

"His biggest bugbear is that the Invitations to Tender period is too short. 'More than any single issue, this is most important: suddenly you have to design a school in 12 weeks and get to a point where it can be accurately costed by a Contractor so a commercial offer can be made. Quite often those bundles will be for £50m or £60m. It's impossible to give the level of attention to design quality in that context, even for a practice of our size.'"

<table>
<thead>
<tr>
<th>Stage</th>
<th>Simplified time schedule of typical PFI process in England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning stage (development of draft output specification)</td>
<td>4 months</td>
</tr>
<tr>
<td>Formal tender issue (OJEU)</td>
<td></td>
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<tr>
<td>Selection of tendering consortia (long-list/short-list)</td>
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<tr>
<td>Consultation of short-list tenderers &amp; accentuation contract documents</td>
<td>Mobilisation design team</td>
</tr>
<tr>
<td>Invitation to Tender (ITT)</td>
<td></td>
</tr>
<tr>
<td>Producing commercial tender-offer (3/4 months)</td>
<td>Preparing tender offer</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Effective design period</td>
</tr>
<tr>
<td>Best and Final Offer (BaFO)</td>
<td></td>
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<tr>
<td>Preferred tenderer</td>
<td></td>
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<tr>
<td>Contract closure (commercial &amp; financial)</td>
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</tbody>
</table>

Figure 14.3: Indication of effective design period in a simplified time schedule of a typical PFI process

[^67]: Article "The ideal architect" by George Hay (26 September 2003), Building magazine
In respect of this design issue, it could in my opinion be beneficial for the Employer if there has already been executed some design work up-front, before the ITT is issued. The tendering consortia or the Employer could perform this initial design work.

14.2.2 Initial design work by the tendering consortia

A possibility is to request the tendering consortia to present ideas about the design work in the consultation stage. This design work should only be of a conceptual (Dutch: schetsmatig) nature. Through this strategy the consortia have already executed research regarding spatial, technical and architectural design solutions before the actual tender stage starts. The initial design work by the tendering consortia serves furthermore as a means for the Employer to get an impression on how the output specification is interpreted into a design by the tendering consortia.

The Netherlands

At the Montaigne Lyceum project the procuring authority requested the tendering consortia in the consultation stage for a conceptual design. This consultation stage took about 2 months. See figure 14.4 for an impression of two variant primary shapes of the school building as part of the initial design work executed by a consortium for the Montaigne Lyceum project. In this project the procuring authority (and users) wanted to have more comfort of the capabilities of the consortia to make a good design on the basis of the output specification. Moreover, this was a good opportunity for the authority to see which direction the consortia were heading for regarding the translation of the output specification into a design.

![Figure 14.4: Impressions of two variant primary shapes of the school building as part of the initial design work executed for the Dutch Montaigne Lyceum project. These impressions were produced by the winning consortium TalentGroep (consisting of the companies Strukton, ISS Nederland and Imtech)](image)

The consultation stage at the project of the renovation of the Ministry of Finance encompassed 3.5 months (including two weeks of Christmas holidays) during which the tendering consortia also executed design work. Important to note is that no judgement of the initial design can take place neither by the procuring authority nor the users. The authority can only make clear if and to which degree the designs are in line with the output specification.

Tender costs

A major disadvantage of requesting short-listed consortia for initial design work is that this impacts on the one hand on the duration of the procurement procedure and on the other hand on their tender costs. The consortia have to invest extra time and (therefore) money to prepare the conceptual designs. Tender costs are in PFI, even without this initial design work, generally far higher than in traditional procurement for public works, as has
been described in section 4.7. It is furthermore recalled in this respect that normally 3 to 4 consortia are short-listed.

14.2.3 Initial design work by the Employer

Another possibility is that the Employer himself has already done some design work up-front. This is however quite unusual in England, because there is for the Employer already an enormous amount of work involved in the PFI process, irrespective of the size of the scheme. The initial design work can already start in the planning stage from the moment the output specification is drafted (see chapter 7) and can be sent alongside the specification to the short-listed tenderers preceding the consultation stage. There are several levels in which the initial design work can be shaped.

Visualising cultural elements

The desired functional, spatial and technical performance requirements of a building can be adequately described in an output specification. However, it is more difficult to make understandable towards tendering consortia the desired requirements regarding the quality of cultural elements of the project. Examples of these elements are the interior and exterior atmosphere and charisma of the building and its relation with the environment (surrounding buildings). An appropriate instrument for an Employer to visualise the desired quality of cultural elements in an output specification is to annex photographs of (parts of) existing buildings that the Employer likes. After all, this is in line with the much-used statement that an image can make more explicit than a thousand words.

This strategy is used in developing the output specification for the project of the Ministry of Finance. In this project, the Employer (Ministry of Finance) co-operated with the Chief Government Architect’s Office (Dutch: Atelier Rijksbouwmeester) in composing appropriate image material to supplement the output specification.

Exemplar designs

The Employer could furthermore execute a series of functional, spatial and/or technical design studies on a conceptual level (in close communication with the users). The design solutions that result from these studies are for the Employer a good instrument to make clear what kind of outcome he is aiming at, without being explicit about the use of materials and products. These design solutions could therefore function for tendering consortia as exemplars to be used as basis or “springboard” in putting their tender-offers together.

To make the matter of exemplar designs more clear, the following 3 figures give some examples of what exemplar conceptual functional and spatial design solutions could look like regarding the new build of a secondary school. After all, the necessary areas for the various functions to be allocated in the school can be shaped and linked in many different ways. Figure 14.5 illustrates the ground floor (academic) plan, figure 14.6 an aerial view of the future secondary school and figure 14.7 alternative classroom layouts.

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68 From the publication: Tips van de Rijksbouwmeester bij de selectie van architecten in het kader van de Europese aanbesteding (2000), Mr. W. Patijn

69 These figures are taken from reports that have been produced by design teams of MACE (RTKL) Architects. These reports form part of the “Building Schools for the Future” programme and were commissioned by the British Department for Education and Skills (DfES) in 2003. The schemes produced by the design teams can be classified as RIBA Work Stage C, which equals “concept design” in the Netherlands.
Figure 14.5: Ground floor (academic) plan of the future secondary school.

Figure 14.6: Aerial view of the future secondary school
Figure 14.7: Flexibility: two alternatives for classroom layout as a result of the use of dismountable partitions between basic classroom units (right corner below: 3-D visualisation of classroom)

Important to note is that the Employer's exemplar designs should not be imposed on the tendering consortia or restrict them in developing their own solutions (therefore the use of the term "exemplar"). The Employer should not promote the exemplar designs as single solutions, but they should function as a basis or "springboard", as explained above. The reason for this is that consortia should at all times be given maximum freedom in translating the output specification into a design in order to harness their creative design capabilities. Moreover, the final responsibility for the design remains with the consortia. In case the Employer imposes design solutions onto the tendering consortia, then the Employer would share in the design risk.

Advantages of exemplar designs

The following potential advantages of initial design work by the Employer in the form of exemplar designs can be mentioned:

- The tendering consortia could start their design work during the tender stage from a certain level, instead of starting from scratch. This might result in more sound and better worked out design solutions as a response to the ITT. Because the design can be worked out in more detail, the tendering consortia are able to make a better estimation of the unitary charge payments that are required from the Employer.

Figure 14.8 gives a visualisation of this advantage, assuming that the design work progresses linearly in time. The progress of the design in time is in reality obviously
not linear and differs per project, hence the two curved lines. However unlikely, the consortia always have the possibility to reject the Employer's initial design work and start from a "blank piece of paper".

![Diagram showing design stage process]

Figure 14.8: Visualisation of the advantage of preparatory design work in the tender stage

- By executing exemplar design work beforehand, the Employer can avoid that tendering consortia go completely the wrong track (in perception of the Employer). In other words: the preparatory design work can steer the tenderers in a design direction of the Employer's preference.
- The Employer is better able to weigh the various tender-offers against one another, because the Employer's exemplar designs is likely to function as basis for the offers of the tendering consortia.
- The exemplar design work can give the Employer a better grasp on the affordability of the project.

Because of these advantages, the execution of initial design work by the Employer (in the form of exemplar designs) has my preference above initial design work by the tendering consortia, which contributes in their tender costs.

The Netherlands

In both Dutch PFI public building projects no initial design work had been executed by the Employers in the sense that this could be used as basis or "springboard" for consortia in putting their tender-offers together. At the project of the renovation of the Ministry of Finance, however, the desired quality of cultural elements had been visualised in the output specification, as has been mentioned above.

14.2.4 Employer's architect

In order to execute the initial design work (visualising cultural elements as well as exemplar designs), the Employer should employ an architect (or design team) in the PFI process. This architect could in addition to the development of the output specification, the visualising of cultural elements also develop the exemplar design solutions on a conceptual level according to the Employer's preferences. In other words, a "conceptual design stage" will in this situation be incorporated in the planning stage.
The English Standard 7000 (1995) that is used in design management defines the conceptual design stage as follows:

"Preliminary research and design studies to establish design alternatives that merit further development."

The initial design work should together with the draft output specification, risk allocation and Project Agreement be issued to the short-listed tenderers in the consultation stage.

The Employer's architect can furthermore fulfil a role as liaison-officer in the PFI procurement procedure (see figure 14.10):

- In the first place, he can give guidance and advice during the tender stage to the architects of the tendering consortia, without actually constraining them in their design work and stopping them to come up with their own solutions. After all, the (architects of the) short-listed tenderers have to take full responsibility for both the glories and failures of the design and the Employer's architect needs to be wary of that. It is therefore advisable that the Employer carefully chooses an architect that is not going to be too "headstrong" (Dutch: eigenzinnig);

- Secondly, he is the ideal party to develop a strong relationship with the users (addressing the issues described in subsection 14.1.2). The Employer's architect could function as a single point of communication for the users during the procurement procedure so that they do not have to communicate with each architect of the tendering consortia. This could also streamline the communication process for the consortia's architects, because users are in general inexpert (Dutch: ondeskundig) in the area of design issues.

It must be noted, however, that ultimately there is no substitute for direct contact between the users and the consortia's architects. There is the danger that the Employer's architect becomes a filter between them.

![Diagram showing the role of the Employer's architect as a liaison officer](image)

Figure 14.10: Employer's architect in role of liaison-officer
The Netherlands
In the project of the renovation of the Ministry of Finance the Employer co-operated with the Chief Government Architect's Office (CGA) (Dutch: Atelier Rijksbouwmeester) in composing appropriate image material to visualise the desired quality of cultural elements of the Finance building in the output specification. The CGA is a department of the Government Building Agency (GBA) (Dutch: Rijksgebouwendienst) and promotes and monitors the urban embedding and architectural quality of government buildings. In my opinion, the CGA could therefore be the ideal party to take responsibility for the execution of exemplar design work and to function as liaison-officer in PFI government building projects.
14.3 Changes in building design and FM services

Notwithstanding the efforts and best intents of the procuring authority, but also of the preferred tenderer during the procurement process, PFI projects inevitably change after the contract is signed. These changes could concern the building design or hard/soft FM services. So although it seems in contradiction with the contractual tight nature of PFI, it is necessary for PFI contracts to be flexible so that changes can be incorporated.

From a survey conducted by the UK National Audit Office in 2001, a great majority of the PFI contracts in the study included procedures for dealing with change (so-called variation procedures). However, despite the importance, still 11% of the procuring authorities did not take account of any variation procedures in the contract. Furthermore, the survey demonstrated that approximately 55% of the surveyed PFI projects already had undergone some form of change, although most of the projects have only been in existence for just a few years. The changes generally had to do with changes in hard/soft FM services, the introduction of new soft FM services, additional construction works and changes to the original design of the building.

14.3.1 Necessity for flexibility

The output specification as part of the contract (or Project Agreement) should not only take into account the public Employer’s current performance requirements regarding the building and services, but also its future ones (to the extent that these can be identified). In line with this, the Employer should require in the output specification provisions for flexibility regarding for example the functional layout of an (office) building.

These provisions have the objective to facilitate (and lower the cost of) the implementation of proposed changes. The Employer could for example require that the working environment should be able to adapt to changes in organisation size, composition and working method in a quick and simple manner. The private consortium has several possibilities to respond to this requirement. The mechanical and electrical engineering services could be designed incorporating flexibility in the use of the office floors by for example providing more power and data outlets than is normally necessary. Furthermore, dimensions could be standardised, removable partition-walls used and “surplus space” could be provided on every floor level of the building in order to accommodate organisational growth. The necessity for flexibility may not be underestimated. The output specifications of the two first Dutch PFI public building projects had taken account of flexibility.

Flexibility regarding building design and services delivered at governmental departments and ministries is especially important, as the number of civil servants employed is very variable over the years due to retrenchments and policy changes. See figure 14.11 for a recent Dutch newspaper article reporting about an upcoming massive wave of resignations at Dutch ministries.

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70 Managing the Relationship to Secure a Successful Partnership in PFI Projects (November 2001), National Audit Office (NAO). The survey is based on results gained from procuring public authorities and private parties involved in over 100 PFI projects where contracts had been let prior to 2000. The projects covered various sectors, such as healthcare, transportation infrastructure, prison service and departmental accommodations.
There will inevitably be changes during the contract term in the Employer's requirements set out in the output specification and also in the Contractor's methods of delivering those requirements. Therefore it is in the interest of all involved parties that the contract incorporates procedures that state how to deal with changes concerning building design and/or hard/soft FM services. Both the public Employer and hard/soft FM Contractors could propose changes during the operational stage of the project.

14.3.2 Changes proposed by the Employer

If the Employer desires to make a change effecting the building or services delivered, in England the Employer needs to go through a so-called variation procedure. In this procedure, the Employer has to serve a notice of change on the private consortium (or SPV). This notice sets out the intended change and requires the SPV to provide an estimate of the technical, financial, contractual and timetable implications of the intended change.

There could be reasons for the Contractor to object to a proposed change of the Employer. Examples of these reasons are the following:

The proposed change
- forces the Contractor to infringe any laws;
- would adversely affect the health and safety of any persons;
- would adversely change the nature of the project (and thus the risk profile). This could lead to an increased risk for the Contractor to perform below the contractually agreed service standards for which he can get penalised.

Important to note in respect of the last reason is that project financiers have a large influence on the decision of a Contractor to agree to execute a proposed change. Understandably, besides the Contractors, the financiers will be concerned that the changes will not have an adverse impact on the project's risk profile and thus on the ability of the SPV to fulfil its repayment obligations. If the impact of the proposed change is adverse, the financiers could require more risk premium through which the financing charges of the SPV increase. From this can be concluded that private finance in PFI may tend to regulate the level of change that an Employer desires to put through.

Small works changes

The clause in a PFI contract describing the variation procedure can be quite comprehensive and, as a consequence, may take a long time to work through.\(^{21}\) In order to facilitate the change procedure concerning non-complex, small or minor changes to the

\(^{21}\) Based on section 12.4 "Change in Service" of the Standardisation of PFI Contracts Version 3 (April 2004)
building (not exceeding a certain pre-agreed financial threshold), it is advisable to incorporate a so-called "small works" change procedure into the contract. This procedure forms an alternative to the formal variation procedure to deal with small works changes quick and efficiently.

Costs of changes

When the public Employer desires to make changes to the building design or services delivered, it bears the cost as it would in traditionally procured buildings and services. However, the important difference with PFI is that if the Employer wants to make a change, he is usually locked into a particular (sub-)Contractor to execute the change. It will then be difficult to be ensured of a fair price, in other words of value for money.

In order to give the Employer the reassurance that a Contractor prices the proposed changes fairly, the following arrangements need to be in place in the contract:

- Transparency of cost information on which the Contractor's quotation is based (open-book). On this aspect can be commented that "open book" to a private party does not have to be the same as how a public authority perceives "open book".
- Benchmarking (Dutch: het maatstaven van) the costs of implementing a change against the market costs, so that can be proved that the costs are in conformity with the market. The Employer, Contractor or an independent third party could be responsible for the benchmarking process, both from a cost and management perspective. In England, it is generally the responsibility of the Contractor. Important in benchmarking the costs of a certain change is how is arrived at a representative sample. This needs to be contractually agreed between the Employer and SPV.
- Including (pre-priced) indexed unit rates of for example labour and materials;

Regarding the costs of changes to the building design or services delivered, in my opinion two aspects need to be considered. These aspects concern the importance of the "informed" Employer and competitive tendering on the market.

Informed Employer

The Employer's notice of change has to set out the desired change in building design or FM service in sufficient detail to enable the relevant Contractor to calculate the implications of the change (as has been mentioned above). One of these implications is the cost of the change for the Employer.

It is essential for the Employer to describe the desired change in sufficient detail in order to properly manage the costs of the change. The Employer therefore needs to be an "informed" Employer knowing exactly what his users require to be changed in the building design or services delivered. The danger in this is that users may ask for changes in such a way that they actually impact in a higher financial sense to the Employer than is actually needed. This is especially important in a large complex organisation as in a hospital.

So it is important that the Employer's organisation contains a team of people that can interrogate users that have a request for a change in order to understand what it is that they really need and not what they ideally need. This information can then be presented to the SPV. In this way the Employer can keep control over change costs.

Competitive tendering

In case the change encompasses a discrete package of work (such as a new type of soft FM service or additional construction works) and its expected cost exceeds a certain pre-
agreed threshold, the Employer could require the SPV in the contract to organise a tender. In this way, the Employer receives alternative quotations formed in competition for the new service or works to be executed.

This arrangement should not result in major difficulties. The partners in the SPV are usually parent companies (equity holders), which put all the work that needs to be executed out to contract. The sub-contracts are normally concluded with Contractors that form part of the parent companies in the SPV (subsidiaries). These Contractors (or management companies) put different packages of work out to sub-Contractors with which they have had a good working relationship in previous projects or through a competitive tender process. See also the typical PFI contractual structure in figure 4.5.

Essentially, the Contractors do not care (within certain boundaries) which sub-Contractor provides the new type of hard/soft FM service or additional construction works. They work on a management fee basis and put a percentage on top of the costs of each variation.

In conclusion, it should be recognised that PFI does not lend itself particularly well to (massive) changes on a regular basis. This is typically made clear in the statement of Mr. Richard Abadie, Head of PFI, HM Treasury:

"I would not advise people to sign 30-year contracts if they expect them to change frequently on a large scale."

It is essential in PFI to have stated what the long-term project requirements are before tender issue. If this is not feasible or not considered thoroughly, there is no point in entering into a PFI contract in the first place.

The Netherlands

The contracts in both Dutch PFI public building projects contain a comprehensive change mechanism in which a special variation procedure is incorporated for small or minor changes to the building on the proposal of the Employer. The small works change procedure at the Montaigne Lyceum project goes by the term "klusjesregeling" (Dutch). This procedure allows the Employer among other things to request the SPV to execute changes to the school building of subordinate (constructive) nature up to a certain pre-agreed budget.

In order to be assured of a fair price, which is in conformity with the market, the last two above-mentioned arrangements of open-book and benchmarking are in place in both Dutch projects. At the Montaigne Lyceum it is not contractually laid down that the Employer can require the SPV to organise a tender in case the proposed change encompasses a discrete package of work and its expected cost exceeds a certain pre-agreed threshold.

14.3.3 Changes proposed by the Contractor

As for the Employer, it should also be possible for the hard/soft FM Contractors to propose changes during the operational stage of the contract. The need for the Contractors to propose changes will primarily be financially driven. This means that the purpose of a change will be that the Contractor can work more efficiently (so reducing costs of delivering the service) and as a result can improve his return.
The importance of streamlining the service delivery process is recognised by the HM Treasury and it is emphasised in the British standardised PFI Contract\textsuperscript{72}:

"(...) the Contractor should be encouraged to find ways of delivering the service more cheaply and efficiently."

It makes therefore sense that for changes proposed by a Contractor a quick, non-comprehensive change procedure is incorporated into the contract for changes that only concern the way in which a particular service is delivered (methodology) and do not effect the actual performance standard as specified in the output specification.

In both Dutch PFI public building projects also a distinction is made between change procedures for radical changes concerning the performance standard of services delivered and change procedures for small or minor changes that should not impact on the quality of services delivered. In the Montaigne Lyceum project the change procedure for these latter changes is called the "aanpassingsprocedure" (Dutch). This (non-comprehensive) change procedure has the purpose to give the Contractor more flexibility in the way he provides his services.

A Contractor always needs to have formal acceptance of the Employer before he can implement a change. The reason for this is that the Employer has to have an opportunity to object to the change. If a Contractor implements a change in service delivery method without the Employer's formal acceptance, he risks to get penalised.

In large-scale projects, where a range of sub-Contractors are employed, it is often cumbersome for hard/soft FM Contractors at the bottom of the organisational structure (who actually deliver the services on site) to change the way in which they deliver services. This is related to the hierarchical levels in the project organisation.

**Problem of hierarchy**

In line with the necessity to gain formal acceptance from the Employer for a change in method of service delivery, the following problem may come up. A change proposal of a sub-Contractor at the bottom of the organisational structure can take a long time to be approved by the Employer because of the different hierarchical levels in the project organisation that the proposal needs to channel through. The following example is given to clarify this point.

\textsuperscript{72} Section 12.6 "Contractor changes in service" of the Standardisation of PFI Contracts Version 3 (April 2004)
Security service

In a PFI project, Contractor A is responsible for providing security guards on site. See for the organisational structure of the project the figure below. Contractor A wants to make a change in the manning levels at the entrances of the building, because he feels that it would be better for the overall security of the building (so for benefit of the Employer). According to the contract, he needs to discuss this with the company that contracted him (Contractor Soft FM). On his turn, the Contractor Soft FM should hand in a proposal to change the security method statement at the SPV (step 2), which then needs to be approved by the Employer (step 3). After acceptance (with or without modification), the Employer and SPV adjust the relevant contract documents (method statements) that are necessary to give effect to the change in method of service delivery.

![Diagram showing the organisational structure of the project and the steps involved in making a change in the security method statement.]

Obviously, this is a time-consuming procedure, which may make sub-Contractors reluctant to start the change procedure in the first place. So the hierarchy negatively influences the willingness of Contractors who actually deliver the services on site to improve their method of service delivery over the years of the contract. From this can be concluded that in large-scale projects, before contract signature, the output driven PFI contract provides FM sub-Contractors much freedom in organising their service methodology, but the hierarchy and contractual tightness seems to limit their freedom during the operation in large-scale PFI projects where a range of sub-Contractors are involved.

Shortening of communication lines

To address the problem of hierarchy that results in an often unnecessarily cumbersome and time-consuming change procedure, communication lines should be shortened. This means that in a change procedure for relatively minor changes the sub-Contractor should be able to communicate directly with the Employer. However, the FM Contractor should also be informed about the proposals and be involved in the communication with the Employer, because the sub-Contractor is under contract of the FM Contractor. In a periodical meeting with the Employer, the sub-Contractor could discuss (with presence of the FM Contractor) any proposed changes in method of service delivery. After acceptance, the sub-Contractor could be given exclusion from the penalty system up to the moment that the Employer and SPV have adjusted the relevant contract documents.
Reluctance from Contractors

In many cases, a change proposed by the sub-Contractor will involve a decrease of the costs to deliver the service (more efficient delivery), as has been mentioned in the beginning of this subsection. If costs will be saved by a change in method of service delivery, the savings need to be shared between the sub-Contractor and Employer (so-called benefit-sharing). It can be argued that sub-Contractors are reluctant to share any financial benefits with the Employer, but at this point the quality of the relationship with the Employer comes to the front.

14.4 Performance incentives

The Employer is able to make deductions from the unitary charge payments in case of poor performance by the SPV, as has been explained in subsection 8.2.1. The primary purpose of these deductions is to incentivise the SPV to deliver the building and hard/soft FM services timely and in conformity with the performance standards in the output specification. The deduction system forms part of the payment mechanism and application of deductions is based on monitoring by the Contractors (see subsection 8.2.3).

In case Contractors in PFI do not deliver the quality level of service that is stated in the output specification (performance default), then they risk getting penalised by means of deductions in the unitary charge payments. Performance defaults are however an inevitable consequence of the delivery of services. It is for example not possible to install a lighting device for which the Contractor can guarantee that it will never break down during the operational period of the contract. Certain rectification periods are therefore built into the outputs specification and certain (monthly or annual) failure allowances for service components are incorporated into the payment mechanism.

14.4.1 Deduction system

Understandingly, Contractors do not like to get deductions and therefore the deduction system provides an incentive to meet the standards as stated in the output specification. The application of deductions may have, however, two negative side effects.

Focus on avoiding penalties

On the one hand the Contractors may not be sufficiently stimulated to improve the quality of their service delivery during the operational stage, because they are too much focussed on avoiding penalties. This particularly refers to soft FM Contractors. The following example is given to clarify this point.

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**Catering service**

Propose a PFI project includes a catering service that encompasses among other things the provision of an executive lunch and dining service (on request). The catering Contractor providing this service has to make sure that he serves the food on time, otherwise he risks getting penalised. A request for lunch and dinner has to be made two days before the service is desired in order to make the necessary preparations. In case a request comes in “too late”, for example the day before the service is desired, then the catering Contractor could decide to refuse that request, because it may have a knock-on effect on other already scheduled requests in the sense that these may not be delivered in time.

In this example the catering Contractor is more concerned about the danger of deductions then providing a better service by also accepting late requests.

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Defensive type of behaviour

The deduction system stimulates on the other hand a defensive type of behaviour among hard/soft FM Contractors, primarily in large-scale projects where much work is put out to contract to a range of sub-Contractors. In these projects it is not always clear which Contractor is responsible for performance defaults and has to suffer for the penalty as a result of the default.

The defensive type of behaviour of Contractors may lead to a “pass-the-parcel” or “blame” culture resulting in more disputes. This culture can exist vertically in the chain of Contractors as well as horizontally between hard and soft FM Contractors. Again an example will be given to illustrate this point (see next page).

Security service

Propose a PFI project includes a security service. The security encompasses a "hard" (equipment & maintenance) as well as a "soft" package (guards, control-room employees). There are a number of different Contractors involved in this project that deal with the security service (see the figure below).

The SPV has subcontracted the "hard" security package to Contractor 1. This package includes the equipment and maintenance that goes with systems such as CCTV, access control (card readers) and intruder alarm. Contractor 1 has as a hard FM management company subcontracted the design, installation and maintenance of the hard security package to Contractor 2. On his turn, Contractor 2 has subcontracted the maintenance of the hard security package to Contractor 3. The SPV has furthermore subcontracted the "soft" security package to Contractor A. This package covers the people that operate the hard FM package. Contractor A has as a soft FM management company subcontracted the provision of security personnel to Contractor B.

The result is that sub-Contractor B operates the equipment that is provided by sub-Contractor 2 and is maintained by sub-sub-Contractor 3. In case there is a security service default and someone accesses the building unauthorised, it could be on occasions quite difficult to pin down which Contractor is responsible for the default. The following questions need to be answered. Has Contractor 2 designed and installed the equipment properly? Has Contractor 3 maintained the equipment properly? Has Contractor B trained their personnel to use the equipment properly?

In this example there could be three Contractors (in red frame) arguing about who is responsible for the default and passing the penalty between them.
Spirit of the contract

PFI projects are in their nature relatively complex and contractual tight. The public Employer therefore may tend to work strictly according to the clauses of the contract in applying deductions. However, not the written word of the contract, but its actual "spirit" is the primary objective what the Employer (and also the involved Contractors) should try to achieve in working with a PFI contract. This means that the Employer should conduct an "intelligent" and pragmatic approach in the application of the deductions.

The involved Contractors should furthermore prioritise the improvement of their relationship (open communication) above the protection of their own interests. This may be difficult, but it is fundamental to achieve a good relationship and long-term success.

The spirit of the contract unfortunately cannot be made clear in writing (black and white). A lot has to do with the attitude of both the Employer and the involved Contractors, and with the quality of the relationship between the parties in the project.

14.4.2 Bonus system

From the previous subsection can be concluded that the deduction system comes with negative side effects. It could therefore be helpful in my opinion if the payment mechanism also has a "positive side" to compensate the down side: rewarding for good performance. This means that performance that is better than required in the output specification is financially rewarded by a bonus. By introducing this, hard/soft FM Contractors have an incentive to perform better each time and are more willing to raise their service levels over the contract term.

So in this model the performance incentive should incorporate penalties as well as bonuses, see figure 14.12. This suits the definition of "incentive" according to the Cambridge Online Dictionary73:

"An incentive is something which encourages someone to do something”

Figure 14.12: The performance incentive should incorporate penalties as well as bonuses

73 www.dictionary.cambridge.org
Nature of the bonus

In this model the bonus' nature is that it does not form an essential part of the unitary charge payments in order for the Contractors to manage their work. It has to be regarded as an appreciation for the executed performances, in other words a "pat on the Contractor's back". The bonus should furthermore be a financial reward for performances above the standards set out in the output specification and not form a buffer or "savings" with which future penalties can be covered. The reason for this is that a buffer reduces the "pain" of penalties and that is not in accordance with the intention of the deduction system.

Measurement of bonus levels

The measurement of the level of bonuses can take place qualitatively, quantitatively or a combination of both, depending on the type of project.

• Qualitative measurement (satisfaction surveys)
  The SPV, Employer or an independent third party could send (monthly, quarterly or twice a year) satisfaction surveys to all users in order to assess how they view the quality of the delivery of hard/soft FM services. In the surveys the different services can be rated from "excellent" to "poor" or from "very satisfied" to "dissatisfied". These surveys are however based on individuals' perception rather than on hard measurable facts. But in case a great majority of the responses (for example 80%) consistently over time rates the delivery of a particular service "good" to "excellent", then this could be a reason for the Employer to trigger a bonus for the Contractor under consideration.

• Quantitative measurement
  In general, the SPV (or the Contractors) is responsible for the execution of performance monitoring (self-monitoring), as has been explained in subsection 8.2.3. The Contractors have to report on their performance levels in a monitoring report to the Employer on a periodical (usually monthly) basis. The monitoring report usually sets out per service performance indicator the score that needs to be achieved by the Contractor to receive full payment (agreed standard) against the actual obtained score (obtained standard). In case the obtained score falls below the score to receive full payment, then payment deductions are applied. The performance indicators obviously have a maximum score of 100%, but they are usually set at a lower level (90% or 95%) to incorporate failure allowances (see also at the beginning of this subsection).

In theory, the score of the performance indicator can be set at a slightly lower level. If the Contractor performs below that level, he gets penalised (as in the traditional situation). But if the Contractor manages to perform better than the agreed standard he receives a "top-up" payment or a bonus. The Contractor could in this way be incentivised to perform better each time and he is more willing to raise his service levels over the contract term.

To clarify this point two examples are given that are based on the monitoring system used by the hard and soft FM Contractors at the Worcester Royal Hospital PFI project.
Example 1: Catering service (soft FM)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Indicator</th>
<th>Standard</th>
<th>Measurement criteria</th>
<th>Monitoring Frequency</th>
<th>Score to receive full payment</th>
<th>Actual score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery of patient food temp</td>
<td>Food temp</td>
<td>All food to be delivered to wards at correct temperature</td>
<td>A temp check of randomly selected items made within 5 min of food being delivered to the ward</td>
<td>Weekly</td>
<td>95%</td>
<td>100%</td>
</tr>
</tbody>
</table>

In this example the catering Contractor scores better than the score to receive full payment (agreed standard). As a result he receives a bonus.

Example 2: MEP (hard FM)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Indicator</th>
<th>Standard</th>
<th>Measurement criteria</th>
<th>Monitoring Frequency</th>
<th>Score to receive full payment</th>
<th>Actual score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp control</td>
<td>Air temp</td>
<td>Maintain temperature of 23 °C +/- 3 °C in clinical areas</td>
<td>Temperature control by building management system (BMS)</td>
<td>Continuously</td>
<td>95%</td>
<td>90%</td>
</tr>
</tbody>
</table>

In this example the MEP Contractor scores lower than the score to receive full payment (agreed standard). As a result he is penalised.

The Netherlands

At the Montaigne Lyceum project no bonus system as performance incentive is incorporated in the payment mechanism due to budgetary restrictions. The Employer in this project cannot afford any more expenditures than already have been agreed in the contract with the SPV.

The Employer at the project of the renovation of the Ministry of Finance is intends to incorporate an annual bonus in the contract with the SPV. How the system will be arranged is not clear at the moment of finalising this report, but probably user satisfaction surveys will be used in defining the bonus for the hard/soft FM Contractors. One of the difficulties that the Employer meets in this project is the interweaving of soft services that the Employer (partly) keeps under its own management and responsibility with soft services of which the management and responsibility is completely transferred to the private consortium.
Parts 5: Conclusions & recommendations
15 Conclusions and recommendations

The research question as stated in chapter 2 will form the guideline for the contents of this chapter. The research question is for convenience recalled:

What can Dutch private and public parties that are going to participate in future PFI projects learn from the English PFI public building practice with regard to output based working?

The following conclusions can be stated, resulting from chapter 14 (part 4: Analysis) of this thesis research.

User involvement
With regard to user involvement a distinction is made between the planning stage and procurement procedure of a PFI project.

- Planning stage
  The involvement of users (public sector employees that provide services as well as “consumers” of these services) is very important in the planning stage of a PFI project. In this stage the output specification is written. There is a danger that procuring authorities may limitedly involve users as a result of inexperience and a tight time scale. Users may furthermore be perceived as troublesome in the delivery of the output specification because of varying views regarding design aspects of the building and/or services. If well organised and managed, the involvement of users does not have to lengthen the duration of the planning stage.

  In both Dutch PFI building projects users have played a significant role in the development of the output specification.

- Procurement procedure
  The relationship users – architects of the tendering consortia is important during the procurement procedure; it is essential that this relationship works well. Users therefore have to communicate several times with each of the consortia’s architects separately in this stage, because the consortia are in competition. This results in a tiresome and inefficient process for the users, especially in case the project concerns an organisation with a large variety of users (hospitals, government departments). The Employer could in my opinion address this issue by employing a consultant as “liaison officer” between the users and consortia’s architects. It must be noted, however, that ultimately there is no substitute for direct contact between the users and the architects.
In both Dutch PFI building projects several meetings were organised between the users and consortia’s architects during the tender stage (without a special “liaison officer” being appointed by the Employer).

**Design work**

The period of time in PFI in England to prepare a design in accordance with output specification typically comprises around 4 months (before BaFO). For the “effective” design period about 2 to 3 months remain. This period, in which the primary design parameters are fixed, is short compared to the traditional situation. This may not be troublesome for tendering consortia, but the negative consequence of the relatively short effective design period in PFI may go at the expense of design quality. Therefore, in my opinion it could be beneficial for the Employer if there has already been executed design work before the tender stage takes place. This initial design work could be executed by:

- **Tendering consortia**
  
The Employer could request for functional, spatial and/or technical design solutions of a conceptual nature in the consultation stage.

  The design work by the consortia could also serve as a means for the Employer to get an impression on how the output specification is interpreted. A major disadvantage, however, is that the initial design work impacts on the duration of the procurement procedure and on tender costs (the consortia have to invest extra time and money).

  At the Montaigne Lyceum project, the procuring authority requested the consortia for a conceptual design in the consultation stage. This stage took 2 months.

- **Employer**

  There are several levels in which the Employer’s initial design work can be shaped:

  - **Visualising cultural elements:** to make understandable the desired requirements regarding the quality of cultural elements of the project (photographs). These elements include the interior and exterior atmosphere and charisma of the building and its relation with the environment. This strategy was used in developing the output specification for the project of the Ministry of Finance.

  - **Exemplar designs:** conceptual functional, spatial and/or technical design solutions. These solutions are a good instrument to make clear what kind of outcome the Employer is aiming at and can hence be used as a “springboard” for consortia in putting their tender-offers together. Exemplar designs should not be imposed on the consortia (because the design risk is transferred to the private sector).

  In both Dutch PFI public building projects the Employers did not executed initial design work in the sense that this could be used as a “springboard”. At the renovation project of the Ministry of Finance, however, the desired quality of cultural elements had been visualised in the output specification, as mentioned above.

  To execute the initial design work, the Employer should employ an architect. This architect also can fulfill the role of liaison-officer to guide to the consortia’s architects during the tender stage and to develop a strong relationship with the users. The Dutch Chief Government Architect’s Office (Dutch: Atelier Rijksbouwmeester) is in my opinion an ideal party to take responsibility for the execution of exemplar design work and to function as liaison-officer in PFI government building projects.
Changes in building design and FM services

The output specification should request tendering consortia to take account of flexibility in building design, because PFI projects inevitably change after the contract is signed. Flexibility in design can streamline the implementation of changes during the operational stage of the contract. Both output specifications of the two Dutch PFI public building projects had taken account of flexibility.

It is in the interest of all involved parties that the contract incorporates procedures that state how to deal with changes concerning building design and hard/soft FM services. The public Employer and hard/soft FM Contractors could propose changes.

- **Changes proposed by the Employer**
  
  Finance in PFI tends to regulate the level of change that an Employer desires to put through. Project financiers are concerned that the changes will not have an adverse impact on the project's risk profile and thus on the ability of the SPV to fulfil its repayment obligations.

  In order to facilitate the procedure concerning small changes to the building on the Employer's proposal, a so-called "small works" change procedure should be incorporated into the contract as an alternative to the formal variation procedure.

  The Employer needs to have the following arrangements in place in the PFI contract to have the reassurance that a Contractor prices proposed changes fairly:
  - Transparency of information on which the Contractor's quotation is based (open-book);
  - Benchmarking the costs of implementing a change against the market costs, so that can be proved that the costs are in conformity with the market. The Employer, Contractor or independent third party could be responsible for this.
  - Unit rates (indexed) of for example labour and materials;

  Regarding the costs of changes, the following two aspects need to be considered:
  - **Informed Employer**: the Employer needs to be an "informed" Employer to set out his desired change in sufficient detail so that proper management of the costs of the change is possible. This means that the Employer exactly has to know what his users require to be changed in the building design or services delivered.
  - **Competitive tendering**: in case the change encompasses a discrete package of work and its expected costs exceeds a certain pre-agreed threshold, the Employer could require the SPV to organise a tender. In this way, the Employer receives alternative competitive quotations for the new service or works to be executed.

  The contracts of both Dutch PFI public building projects contain a comprehensive change mechanism in which a special variation procedure is incorporated for small changes to the building on the Employer's proposal. Also the arrangements of open-book and benchmarking are in place in both projects. At the Montaigne Lyceum it is not contractually laid down that the Employer can require the SPV to organise a tender for a proposed change.

- **Changes proposed by the Contractor**
  
  The Contractor should be encouraged to find ways of delivering the service more economically. A non-comprehensive change procedure for Contractor's changes
should therefore be incorporated into the contract for changes that only concern the way in which a particular service is delivered (methodology) and do not effect the actual performance standard as specified in the output specification.

In both Dutch PFI public building projects a distinction is made between change procedures for radical changes concerning the performance standard of services delivered and change procedures for small or minor changes that should not impact on the quality of services delivered.

In large-scale projects in which a range of sub-Contractors is employed, the hierarchical organisational structure can make it cumbersome for hard/soft FM Contractors at the bottom of the organisational structure to change the way in which they deliver services. To address this problem communication lines should be shortened: for minor changes the sub-Contractor should be able to communicate directly with the Employer.

Performance incentives
The Employer is able to make deductions from the unitary charge payments in case of poor performance by the SPV. The primary purpose of the deduction system is to incentivise the SPV to deliver the building and hard/soft FM services timely and in conformity with the performance standards set out in the output specification. The application of deductions may have, however, two negative side effects:
- Contractors may be too much focussed on avoiding penalties;
- A defensive type of behaviour among the Contractors is stimulated ("pass-the-parcel" or "blame" culture).

It could therefore be helpful in my opinion if the payment mechanism also has a "positive side": a bonus system. This means that performance that is better than required in the output specification is financially rewarded. By introducing this, Contractors have an incentive to perform better each time and are more willing to raise their service levels over the contract term. The measurement of the level of bonuses can take place qualitatively (satisfaction survey), quantitatively (performance monitoring) or a combination of both, depending on the type of project.

At the Montaigne Lyceum project no bonus system as performance incentive is incorporated in the payment mechanism due to budgetary restrictions. The Employer at the renovation project of the Ministry of Finance intends to incorporate an annual bonus in the contract with the SPV.
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Appendix A: Assessment of PFI Performance in the UK

In September 2002, the HM Treasury conducted research to investigate the performance of the PFI procedures regarding construction and operation. At the time of executing the research, 451 PFI projects in the UK had completed construction and were in operation. The scope of the HM Treasury research was restricted to operational PFI projects in the UK with a capital value in excess of £20 million. Smaller capital value projects and IT projects, both the subject of separate study programmes, were excluded in this research. The sample consisted of 61 projects that represented about 10 per cent of all completed UK PFI projects in 2002. The outcomes of the research are published by the HM Treasury in the report “PFI: Meeting the Investment Challenge”. See figure 1 for the division of the sample projects by sector.

![Project sample divided by sector](chart)

Figure 1: HM Treasury PFI project sample divided by sector

Moreover, the National Audit Office (NAO), an independent entity charged with assessing the central government PFI programme in the UK, examined at the end of 2002 the construction performance of English PFI contracts. The research has been based on a sample of 37 PFI projects for which construction was either complete or was due to be completed according to the contract by summer 2002. The research outcomes are published by the NAO in the report “PFI: Construction Performance”. See figure 2 for the division of the sample projects by sector.
This chapter gives in two sections an overview of the research outcomes regarding construction and operation performance, respectively. Important to note in this respect, is that it is not possible to judge whether the projects in the samples could have achieved the same outcomes using the traditional procurement route.

**Construction performance**

The key factors to assess the construction performance of PFI projects include delivery of the asset both on time and to budget and the quality of the design and construction.

**Delivery on time**

According to the research outcomes, 88% of the HM Treasury sample and 76% of the NAO sample were delivered on time or earlier than specified in the contract. This result is an improvement compared to other research in traditional construction performance. In 2001, the NAO published the report "Modernising Construction" that concluded that in a sample of 66 traditional construction projects procured by the public sector, only 30% was delivered on time. See figure 3 for a chart illustrating these results.74 Under the NAO PFI sample, of the nine (out of 37) projects that had been delivered later than expected at contract award, six were delayed two months or less.

**Delivery on budget**

In both the HM Treasury and NAO researches, 78% of the projects experienced no construction related price overruns after contract award (see also figure 3). In cases where there had been a price overrun, it had been due to changes led by the public sector, not by the Contractor. The overruns were caused by changes in the contractual

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74 PFI: Meeting the Investment Challenge (2003), HM Treasury; PFI: Construction Performance (2003), NAO; Modernising Construction (2001), NAO
agreed output specification in order to add, improve and/ or change the function of facilities. As a result, the private sector increased its price to reflect these changes. Some of these specification changes were caused by new factors affecting the public sector’s needs after the contract award. However, these changes would also have led to price increase under traditional procurement. Construction cost increases not caused by specification changes were borne by the private sector, with no increase of the public sector unitary charge payments as a result. This demonstrates that construction risk had been effectively transferred to the private sector.

Overall, both the HM Treasury and the NAO research show that most PFI projects provide price certainty to the public sector (although at an early stage of the contract’s life), particularly in comparison with experience of (traditional) construction projects in the public sector. In the report “Modernising Construction”, the NAO reported that in 73% of the traditional construction projects the price to the public sector had exceeded the Contractor’s tender price and the project ran over budget to the public sector.

![Diagram showing comparison between HM Treasury, NAO sample, and NAO report on delivering on time and budget.](image)

**Figure 3:** Comparing PFI projects and traditionally procured projects on delivering on time and budget
Quality of design and construction

Only the NAO examined the quality of design and construction of the projects in the sample. The results are illustrated in charts of figure 4. As can be seen from this figure, in over half of the projects, the public sector departments and project managers rated design and construction quality as good or very good.

![Charts rating quality of design and construction of PFI projects in NAO sample](image)

The NAO report also concluded that the public sector (departments) as procuring entity put more emphasis on design quality in recent PFI projects than had been the case in earlier projects, realising there is a trade-off between design on one side and construction and operating costs on the other. Although design costs are small in relation to a project’s construction and whole life operating costs, they can have a large impact on the project’s total capital and operating costs. In stimulating good design in public building projects, the HM Treasury requested the Commission for Architecture and the Built Environment (CABE) to produce a review. This resulted in 2002 in a report “Improving Standards of Design in the Procurement of Public Buildings” with recommendations to assist the development of good design in public buildings.

Operational performance

As many PFI contracts are still in their early years of long-term agreements of up to 30 years, it is difficult to assess the operational performance of PFI projects to date. Nevertheless, research by the HM Treasury and NAO has been executed to gain an indication of operational project performance by surveying the opinions of public sector parties.

HM Treasury study regarding 61 PFI projects, asking the public sector project managers to indicate how far the operational performance of the private sector partner is meeting the expectations at the time of contract close. See for the results figure 5.

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75 PFI: Construction Performance (2003), NAO
76 PFI: Meeting the Investment Challenge (2003), HM Treasury
As can be concluded from the figure, more than three quarters of public sector project managers in the sample described the operational performance of the project "as expected" or better than that. However, almost a quarter of the project managers reported the performance as "less than expected".

These results are in line with the study of the NAO published in their report "Managing the Relationship to secure a successful Partnership in PFI Projects" (2001). In this study, a sample is used of 98 PFI projects in various sectors in the UK, where the contracts had been agreed prior to 2000. At the end of 2000, the NAO asked the public sector parties involved in the sample projects for their perception of the value for money benefits realised in the contracts as well as how it matched up to their original expectations at the time the contract was let. See for the results figure 6.

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77 Managing the Relationship to secure a successful Partnership in PFI Projects (2001), NAO
In total 81% of the interviewed public sector parties perceived the value for money benefits proceeding from their projects at the end of 2000 as “satisfactory” or better. On the other hand, 15% and 4% of the public sector parties perceived the benefits as respectively “marginal” and “poor”. However, as figure 8 demonstrates, there has been a slight decline in perceived value for money since contracts were let.
Appendix B: English legal system

The contents of this appendix have been to a great extent obtained from the publication "Rechtsstelsels in vogelvlucht. Een inleiding tot de privaatrechtsvergelijking" (1981) of J.G. Sauveplanne, professor in the University of Utrecht, the Netherlands.

This appendix discusses the English legal system and all of its elements in brief. After an introduction, Common Law is compared with continental Europe’s Civil Law. The different terms case law, Equity and Statute Law are explained in the subsequent sections. In conclusion, attention is devoted to the issue of codification in the English legal system.

Introduction

The English Common Law forms the basis of the legal systems in the Commonwealth territories (United Kingdom, Canada, Australia, New Zealand and many other generally English-speaking countries) and the United States of America. Most of the territories that have been under English authority have stayed fully or partly English juridically oriented. As a consequence, Common Law has been of influence in a large part of the world.

The term “Common Law” is however being used with varying meanings. Its wide meaning encompasses the complete English legal system. In a more narrow sense, this term is used to indicate just a certain part of that legal system. In this way, Common Law is understood as “strict” case law, opposing both Equity as the more “flexible” case law and Statute Law (see figure 1). Strict and flexible case law are up to date regarded as the basis of the English legal system, as is indicated in figure 1. In this chapter Common Law is used in its wide sense (including Equity and Statute Law) unless otherwise stated.

\[
\begin{array}{|c|c|c|}
\hline
\text{English legal system} \\
\text{(Common Law in a wide sense)} \\
\hline
\text{Strict case law} \\
\text{(Common Law in a narrow sense)} & \text{Flexible case law} \\
\text{(Equity)} & \text{Statute Law} \\
\hline
\end{array}
\]

Figure 1: The English legal system, Common Law, Equity and Statute Law

Common Law versus Civil Law

The Common Law has its roots in mediaeval England. From then, the judgements of the king's judges on practical cases became common property of jurists in the whole of England. The judgements were used as so-called “precedents” that were passed on to jurists’ successors.
Two definitions of the term “precedent” are the following:

Van Dale Groot Woordenboek Nederlands:

“Geval dat reeds vroeger plaatsvond en waarop men zich kan of meent te kunnen beroepen bij een later te nemen beslissing.” (Dutch)

Direct translation in English:

“Case that already took place in the past and to which one can or thinks is able to appeal to a decision that will be taken later.”

Cambridge Online Dictionary (www.dictionary.cambridge.org):

“A decision about a particular law case, which makes it likely that other similar cases will be decided in the same way.”

During the centuries, the English judges built up precedents that were used in subsequent cases. It can be stated that precedents (or jurisprudence) form the jurisdiction in Common Law, therefore it is also indicated as “judge-made-law” or “case law”. However, there is a danger in this of which the Common Law judges need to be aware: improper or outdated decisions may keep on influencing the jurisdiction. This danger is illustrated in the following expression:

“If the doctor makes a mistake he buries it, if the judge makes a mistake it becomes part of the law of the land.”

On the contrary, in continental Europe’s Civil Law, the legislation is based on abstract, general holding, legal rules that are laid down in written statutes (Statute Law). These statutes form in Civil Law the framework in which judges operate, whereas in Common Law the judges have created the framework themselves. In other words, two ways of legal thinking can be distinguished: whereas Civil Law jurists primarily ask themselves what stipulation is applicable on the law case in question, the Common Law jurist checks whether there has been a judgement on a similar case in the past (precedent) and what characteristics of that judgement were.

Up to date, the English legal system does not have codes that cover general juridical doctrines (Dutch: leerstukken) such as in Civil Law. An example of such a doctrine is “Law of Property” (Dutch: Vermogensrecht) in Dutch private law. Moreover, England does not even have a written constitution. Of old, however, the English legislator has settled incidentally specific subjects within private law in statutes. Examples that are related to property are Bankruptcy, Obligations and Companies Acts (Dutch: Vennootschapsrecht). These statutes (or Acts) are laid down in so-called “Statute Books”. So Statute Law is present in the English legal system, but English jurists in general and especially the conservative ones in particular, have given preference to case law as the first source of jurisdiction. This resulted in a limited influence of Statute Law on the development of the English legal system; it is solely regarded as complementary to case law. Because of the minor influence of Statute Law, the English legal system is build up

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An important dichotomy in Dutch law is formed by private and public law. Private law is the part of the legal system that concentrates on the regulation of legal relationships between civilians (natural persons or private corporate bodies). Source: Recht voor ingenieurs, tweede druk (1999)
very casuistic and has stayed unsystematic: it does not have a scientific classification. Therefore, there is in principle no clear distinction between the various areas of justice.

**Strict versus flexible case law**

In medieval England, people had a preference to bring forward a law case at the king's court of justice instead of going to local courts. Reason for this was that on the one hand people had more trust in the functioning of the king's court of justice than of local courts. On the other hand, the judgements of the former were accepted nationwide and, obviously, had more legal force than those of the latter ones.

From the end of the Middle Ages, it became customary to forward persons seeking justice to the king's chancellor in case the king's court of justice could not or did not want to help. If the chancellor found that the requests of a party were reasonable and fair, he ordered the defendant party to comply with these requests on penalty of fine or imprisonment. Gradually, the chancellor developed in addition to the Common Law (in the narrow sense of *strict* case law) a legal system based on reasonableness and fairness: *flexible* case law or Equity. This supplementary legal system developed through jurisdiction in the from the king's court separately operating chancellor's court of justice.

A characteristic difference between Common Law in the meaning of strict case law and Equity is that in Common Law personal circumstances are not taken into consideration at all for the verdict. The judge concentrates purely on the facts and objective aspects of the law case: "Common Law acts in rem". On the contrary, in Equity the personal aspects of the involved parties are also taken into account in the chancellor's verdict. He considers if it is reasonable and fair to intervene in the situation: "Equity acts in personam". As a consequence, in Equity a party can never claim a right to something in a law case starting purely from the facts. In contrast, a judge in Common Law has to adjudge rights if the facts on which these rights can be based are present in the law case.

The existence of the two legal systems next to each other with Common Law as primary system and Equity as supplementary system, both with its own type of jurisdiction, resulted in difficulties. In increasing extent, law cases were prolonged, because a party had to take double proceedings (to and from the Common Law and Equity courts) in order to obtain a certain outcome. The following quotation reflects this problem:

"Equity sends questions to law, law sends questions back to Equity; law finds it can't do this, Equity finds it can't do that." 79

Intervention by the legislator became necessary and in the second half of the 19th century a radical reform of the judicial authority was the result. In this reform, all existing courts lost their nature of independent entities and became departments of the High Court of Justice in which the Common Law and the subsequent Equity jurisdiction were united.

**Statutory Law**

Nor Common Law nor Equity has been capable of giving satisfactory solutions to all raised juridical issues. As causes are put forward the rigidity and formalism of both Common Law and Equity procedures (there is a strong emphasis on the proper conduct of a case) and the sticking to from outdated precedents derived rules. The jurisdiction

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79 Charles Dickens, Bleak House (originally published in 1852-1853)
suffered from these shortcomings and, again, intervention by the legislator appeared to be necessary. As a governmental body, the legislator has a regulating function and can exercise influence on the administration of justice by issuing statutes. Although it used to take in a reserved position, from the 19th century its interference in the English legal system gradually intensified. Since then, the number of statutes that have been included in the Statute Books has expanded continuously.

Especially the older generation of English jurists are averse from the Statute Books. Their attitude to Statutory Law is of a hostile nature: “The Statute is like a tyrant, […] the Common Law is like a nursing father.” They think the legislator should not intervene and should keep away from the jurisdiction.

The statutes in the English legal system consist of particular rules that apply to certain concrete cases, of which as much as possible are summed up in the Statute Books. Obviously, the legislator cannot mention all cases and therefore it also needs to take account of cases that have not been considered. Therefore, often the so-called “eiusdem generis rule” is used at the end of an enumeration to make sure the stipulation also applies to other, equal cases that have not been explicitly mentioned. This casuistic character of Statute Law is in line with the nature of Common Law, in which the judge is used to give a rule on the basis of concrete cases. Following from this, an English judge would not know what to do with general stipulations such as they occur in statutes in Civil Law.

In the English legal system, the principal Common Law and the supplementary Equity are to date still regarded as the basis of the English legal system (see again figure 1). The Statutory Law is not expected to affect the case law, but is solely utilised as a means to complement and improve it. The averse attitude of English jurists to Statute Law has influenced the way of how statutes are interpreted in the English legal system. As in case law, judgements are also used as precedents in Statute Law. From this can be concluded that also in Statute Law, English jurists hold on to jurisprudence as the main source of jurisdiction.

Codification

The complexity and casuistic character of the Common Law have resulted in proposals to gradually implement more codification after the example of codification in continental Europe’s Civil Law. In respect to this, the English judicial authority needs to make a fundamental decision regarding the following question. Should the traditional development of jurisdiction be continued with alongside an incidental settlement of specific juridical subjects in statutes, or should a radical change of course take place by converting the English legal system into a codified system?

The English jurist, as explained before, who is devoted to tradition and reasoning from the basis of concrete cases, is averse from the development towards codification. The growing number of precedents, however, makes the jurisdiction inconveniently arranged and difficult to handle. Moreover, the “incoming tide” of the European Union’s legal system makes it more difficult to preserve the principally casuistic character of English law.
Appendix C: Reasonableness and fairness

In this appendix the principle of reasonableness and fairness in the Dutch and English legal systems comes under discussion. Firstly, the meaning of the principle and its twofold function is explained and secondly, the influence of it in the approach in law cases is described.

The principle

The principle of reasonableness and fairness (Dutch: redelijkheid en billijkheid) plays, in contrast to the English legal system, in Dutch jurisdiction an important role. It is particularly important in Law of Property (Dutch: Vermogensrecht). In the Dutch legal system, this principle may influence the juridical consequences that follow from a law case. In for example Law of Obligations (Dutch: Verbintenissenrecht), which falls under Law of Property, the contractual partners are obliged to act in a fair, decent and reasonable way towards each other. This means that for the interpretation of the contents of a contract between two parties, the judge considers the meaning that each contractual party “reasonably and in fairness” could have attributed to the terms of the contract and what they “reasonably and in fairness” could have expected from each other. Moreover, the judge takes account of the social context and the personal circumstances of the involved parties in the law case.

The meaning of the principle of reasonableness and fairness is described in section 3:12 of the Dutch Civil Code:

"Bij de vaststelling van wat redelijkheid en billijkheid eisen, moet rekening worden gehouden met algemeen erkende rechtsbeginselen, met de in Nederland levende rechtsovertuigingen en met de maatschappelijke en persoonlijke belangen, die bij het gegeven geval zijn betrokken.” (Dutch)

Direct translation in English:

“At the determination of what reasonableness and fairness require, account has to be taken of general acknowledged principles of justice, with the in the Netherlands present juridical convictions and with the social and personal interests, that are involved in the given law case.”

As a result, the judge takes in its verdict account of the characteristics of the contractual parties, such as social class and the amount of juridical knowledge that the parties can be expected to have.
Functions
As unwritten rules of law, reasonableness and fairness fulfil a twofold function according to section 6:248 of the Dutch Civil Code:

Supplementary function; see subsection 1:

"Een overeenkomst heeft niet alleen de door partijen overeengekomen rechtsgevolgen, maar ook die welke, naar de aard van de overeenkomst, uit de wet, de gewoonten of de eisen van redelijkheid en billijkheid voortvloeien." (Dutch)

Direct translation in English:
"A contract does not only encompass the juridical consequences that the parties have agreed, but also those which, according to the nature of the contract, arise from the law, the custom or the requirements of reasonableness and fairness."

Rectifying/ derogating function; see subsection 2:

"Een tussen partijen als gevolg van de overeenkomst geldende regel is niet van toepassing, voor zover dit in de gegeven omstandigheden naar maatstaven van redelijkheid en billijkheid onaanvaardbaar zou zijn." (Dutch)

Direct translation in English:
"A rule being in force between parties as a result of the contract is not applicable, as far as this would be unacceptable in the given circumstances according to standards of reasonableness and fairness."

As a consequence from subsection 2, it appears that:
- Reasonableness and fairness can detract from all other sources of justice, under certain circumstances even from compelling statutory provisions;
- All circumstances of the law case are being considered, including the social and personal aspects;
- The judge needs to adopt a reserved attitude. Only in case the application of a particular rule would be unacceptable in the given circumstances, the rectifying/ derogating function comes due to reasonableness and fairness.

Approach in law cases
As described in appendix B, the principal Common Law (in its narrow sense of strict case law) and the supplementary Equity have traditionally been the basis for English judges in formulating a verdict. Because Equity was regarded as supplementary, reasonableness and fairness played a subordinate role in the English legal system. As a result, judges applied a fairly objective approach in law cases and concentrated in jurisdiction concerning Law of Obligations (Dutch: Verbintenissenrecht) on what had been stated in the contract, or in other words: on the letter of the contract.

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80 Prof. Mr Jac. Hjima en Mr M.M. Olthof, Compendium van het Nederlands vermogensrecht Leidraad voor het NBW met verwijzingen naar het BW (vierde druk, 1990)
81 It must be mentioned, however, that Equity has made some important contributions to certain jurisdictions in English private law (regarding for example real estate, law of trusts and the protection of the married woman). See for more information page 164 – 166 of the "Compendium van het Nederlands vermogensrecht Leidraad voor het NBW met verwijzingen naar het BW" (vierde druk, 1990)
In response to this approach, in England, parties have always taken ample time and devoted much attention in writing a contract in order to make sure that as many aspects as possible are properly covered in the contract. The less attractive side of this is that contracts written under English law are very voluminous and difficult to work through.

In contrast, contracts in the Netherlands are written in a much shorter period of time in which little due attention is devoted to the contents. The danger in this is that the contracts could be full of gaps and ambiguity. In the Dutch construction industry for example, it is no exception that projects are being started without having a clear and finalised contract in place between the involved parties (Employer - Contractor). This indolence departs from the believe in mutual trust and the idea that the contractual situation will become clear during the stages of the building process. Obviously, the appropriateness of this can be questioned. Moreover, in case a dispute between parties exists and this dispute is taken to court, the parties ultimately rely on reasonableness and fairness. However, this indolent approach in the Netherlands is changing. Large Contractors, for example, gradually devote more attention to the actual contents of a contract.

These days the situation in the English legal system seems to be changed in that Equity has gained more importance in jurisdiction. English judges have in practice more or less abandoned the purely objective approach and the holding on to what has been written in the contract. Today it is still the basis of the legal system, but frequently also the context in which a law case takes place and the probable consequences of a verdict are considered. On the other hand, jurisdiction in the Netherlands, in which reasonableness and fairness play an important role, has moved towards a more objective approach. Especially in case of complex cases, the judge tends to hold on to the letter of the contract, because he cannot take stock of the case completely and cannot fully comprehend the context in which the law case takes place.

From this can be concluded that although there are theoretically major differences in how English and Dutch judges apply reasonableness and fairness in approaching contractual law cases, in practice these approaches incline towards each other.

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82 Experiences of Mr. D.C. Orobio de Castro, lawyer at lawyer's office "Stibbe", Amsterdam
83 Article: Contract management een must, author A.M.A. Goossens (www.ghc-international.nl/publications.htm)
Appendix D: Persons interviewed (England and the Netherlands)
## United Kingdom

<table>
<thead>
<tr>
<th>NAME</th>
<th>FUNCTION</th>
<th>COMPANY/ AUTHORITY</th>
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</thead>
<tbody>
<tr>
<td>Mr. Gerry Askew</td>
<td>Technical Operations Director</td>
<td>Workplace Management</td>
</tr>
<tr>
<td>Mr. Julian Daniel</td>
<td>Construction Director (Currently: Head of Global EH&amp;S)</td>
<td>Bovis Lend Lease</td>
</tr>
<tr>
<td>Mr. Miles Delap</td>
<td>Director</td>
<td>Gardiner &amp; Theobald Management Services</td>
</tr>
<tr>
<td>Ms. Carole Ennis</td>
<td></td>
<td>HM Treasury</td>
</tr>
<tr>
<td>Mr. Paul Jenkins</td>
<td>Performance Incentive System (PIS) Manager</td>
<td>Exchequer Partnership</td>
</tr>
<tr>
<td>Mr. David Marsh</td>
<td>Hard FM Manager</td>
<td>Exchequer Partnership</td>
</tr>
<tr>
<td>Mr. Keith Lucas</td>
<td>Soft FM Manager</td>
<td>Workplace Management</td>
</tr>
<tr>
<td>Mr. Matthew Lusty</td>
<td>Project Manager</td>
<td>Stanhope</td>
</tr>
<tr>
<td>Mr. Karan Mangroo</td>
<td>Operations Director</td>
<td>Bovis Lend lease</td>
</tr>
<tr>
<td>Mr. Mark Rawlinson</td>
<td>Operations Manager</td>
<td>Exchequer Partnership</td>
</tr>
<tr>
<td>Mr. Ken Smith</td>
<td>Financial Expert</td>
<td>Exchequer Partnership</td>
</tr>
<tr>
<td>Mr. Dave Shepherd</td>
<td>Operations Manager</td>
<td>Group 4 (Security)</td>
</tr>
<tr>
<td>Ms. Maureen Derbyshire</td>
<td>Operations Manager</td>
<td>Charlton House (Catering)</td>
</tr>
<tr>
<td>Ms. Carole Poole</td>
<td>Operations Manager</td>
<td>OCS (Cleaning)</td>
</tr>
</tbody>
</table>

## Lincolnshire Grouped Schools Project

<table>
<thead>
<tr>
<th>NAME</th>
<th>FUNCTION</th>
<th>COMPANY/ AUTHORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Alison Ashton</td>
<td>Headteacher</td>
<td>Church Lane School (Lincoln)</td>
</tr>
<tr>
<td>Mr. Martin Coleman</td>
<td>Chief Client Officer (Currently: PFI Project Director)</td>
<td>Lincolnshire County Council (Lend Lease)</td>
</tr>
<tr>
<td>Mr. Stephan Loose</td>
<td>Operations Manager</td>
<td>Lend Lease Facilities Management</td>
</tr>
<tr>
<td>Ms. Katie Read</td>
<td>PFI Manager</td>
<td>Lincolnshire County Council</td>
</tr>
<tr>
<td>Mr. Jonathan Todd</td>
<td>SPV general manager</td>
<td>Focus Education (Bovis Lend Lease)</td>
</tr>
<tr>
<td>Ms. Christine Wright</td>
<td>Headteacher</td>
<td>St. Botolph's Primary School (Sleaford)</td>
</tr>
</tbody>
</table>

## Worcestershire Royal Hospital project

<table>
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<tr>
<th>NAME</th>
<th>FUNCTION</th>
<th>COMPANY/ AUTHORITY</th>
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</thead>
<tbody>
<tr>
<td>Mr. Peter Sleightholme</td>
<td>SPV general manager</td>
<td>Lincolnshire County Council/ Bovis Lend Lease</td>
</tr>
<tr>
<td>Mr. Phil Sherratt</td>
<td>Project Manager</td>
<td>Worcester Royal Infirmary NHS Trust</td>
</tr>
<tr>
<td>Mr. Shaun Webb</td>
<td>Operations Manager</td>
<td>Siemens Medical Equipment and General Furniture</td>
</tr>
<tr>
<td>Ms.</td>
<td>Modern Matron Intensive care Unit</td>
<td>Worcestershire Royal Hospital</td>
</tr>
<tr>
<td>Ms.</td>
<td>Modern Matron Radiology</td>
<td>Worcestershire Royal Hospital</td>
</tr>
<tr>
<td>Mr. Shaun St. John</td>
<td>Legal Expert</td>
<td>Bovis Lend Lease</td>
</tr>
</tbody>
</table>
### The Netherlands

<table>
<thead>
<tr>
<th>NAME</th>
<th>FUNCTION</th>
<th>COMPANY/ AUTHORITY</th>
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<tbody>
<tr>
<td><strong>Montaigne Lyceum Project</strong></td>
<td></td>
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</tr>
<tr>
<td>Mr. J. Bartelds</td>
<td>Head of Educational Housing</td>
<td>Ministry of Education, Culture and Science</td>
</tr>
<tr>
<td>Mr. A. van Kessel</td>
<td>Project Manager Montaigne Lyceum</td>
<td>Strukton Integral Projects</td>
</tr>
<tr>
<td>Mr. E. Scholten</td>
<td>Manager Finance</td>
<td>Strukton Integral Projects</td>
</tr>
<tr>
<td>Ms. M. van den Pol</td>
<td>Project Director</td>
<td>Stichting Confessioneel Onderwijs (SCO) Lucas</td>
</tr>
<tr>
<td>Mr. A. de Vries</td>
<td>Consultant</td>
<td>Gronmij Bravenboer &amp; Scheers</td>
</tr>
<tr>
<td><strong>Ministry of Finance project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. S. Bergsma</td>
<td>Occupied with output spec &amp; monitoring</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>Ms. M. Hermans</td>
<td>Knowledge Manager PPP</td>
<td>Government Building Agency</td>
</tr>
<tr>
<td>Ms. P. Meijboom</td>
<td>Division of Government Buildings</td>
<td>PPP Knowledge Centre (Ministry of Finance)</td>
</tr>
<tr>
<td>Mr. R. Onel</td>
<td>Senior Consulting Engineer</td>
<td>Government Buildings Agency</td>
</tr>
<tr>
<td>Ms. D. Vendrig</td>
<td>Division of Government Buildings</td>
<td>PPP Knowledge Centre (Ministry of Finance)</td>
</tr>
<tr>
<td>Ms. H. de Wijn</td>
<td>General Advisor</td>
<td>Chief Government Architect’s Office</td>
</tr>
<tr>
<td>Mr. D.C. Orobio de Castro</td>
<td>Lawyer</td>
<td>Stibbe</td>
</tr>
</tbody>
</table>
Appendix E: Questionnaire interviews
Preparation of the PFI contract

1. When was the official decision made to make use of the PFI procurement procedure to execute the project?

2. When was the contract signed?

3. Were there any other procurement procedures for this project considered other than PFI?
   - Yes
   - No
   If “Yes”, which other procurement procedures were considered?

4. On what grounds was the decision based to make use of PFI for this project?
   - Best value for money in financial terms (as result of PSC);
   - Off-balance sheet financing;
   - To stimulate whole-life costing, by both the public as private sector;
   - Enforcement by the government in order to increase the application of PFI in practice;
   - To focus on primary competences (ministerial tasks, healthcare, teaching)
   - Not having (or willing to make) available human resources for the project
   - Other, ...

5. Preceding the contract closure between the public Employer and private consortium, several preparatory main stages were passed through. Correspond these stages with the stages mentioned below?
   - Initial preparatory stage;
     - Analysis of purpose and necessity of investment (scope)
     - Inventory of renovation/new build options
     - Formulation of initial output specifications
     - Execution of Public Sector Comparator (PSC)
     - Pre-issue of tender (Nationally/ Internationally?)
   - Consultation stage;
     - Formal tender issue
     - Pre-qualification private consortia (long list)
     - Selection of private consortia (short list)
     - Invitation to consult for selected consortia
     - Accentuate output specifications and PSC
   - Tender stage;
     - Invitation to tender for selected consortia
   - Negotiation stage;
     - Invitation to Negotiate
     - Best and final offer (BAFO)
     - Preferred tenderer
     - Commercial & financial closure of PFI contract

6. Is any form of standardisation used in the PFI contract?
   - Yes
   - No
   If “Yes”, what form(s) of standardisation has been used (FIDIC Silver Book)?
7. Were there any intervening moments by the public Employer after contract closure (during design and construction works)?
   □ Yes
   □ No
   If "Yes":
   7a How many intervening moments by the Employer took place?
   7b What was the underlying reason for these moments? Concerning:
      □ Program (scope, output specs)
      □ Finance
      □ Other, ...

8. Is the private consortium obliged to demonstrate (through simulation, calculation) to the public Employer that their design fulfills the output specs?
   □ Yes
   □ No

9. Have any conflicts between the Employer and private consortium occurred up to now?
   □ Yes
   □ No
   If "Yes":
   9a What was the nature of these conflicts? A matter regarding:
      □ Output specs
      □ Finance
      □ Other, ...
   9b How was dealt with these conflicts?
Formulating of the output specification

The objective of the output specification is to set out in a clear and unequivocal manner the service requirements of the public Employer in terms of “output”. This means that the Employer describes what he wants to have in a purely functional manner, being neutral in possible solutions. The extent of detail and output-orientation (restrictions on output) of the specification depends on the complexity of a project and the nature of user requirements.

10. Which parties were involved (before formal tender issue) in formulating the contents of the initial output specs?
   - Employer (public authority)
   - User
   - Consultants (architect, lawyer)
   - Suppliers
   - Financial institutions
   - Other, ...

11. With reference to the previous question: Can you please indicate the extent of involvement, by using the numbers 1 (very high) to 6 (very low).

12. Were (parts of) output specs of similar PFI public building projects used in the development?
   - No
   - Yes
   If “Yes”, of which PFI public building project were (parts of) output specs used and to what extend?

13. Is any form of standardisation used in formulating the output specs?
   - Yes
   - No
   If “Yes”, what form(s) of standardisation has been used?

14. How much time did it take to formulate these initial output specs?

The Public Sector Comparator (PSC) is a tool used as benchmark for assessing the value for money of PFI projects by comparing the PFI procurement route with a traditional form of procurement in financial terms. The PSC may be defined as a hypothetical, risk-adjusted cost analysis, with the public sector as supplier of the project, based on the output specification produced as part of the PFI procurement procedure.

Obviously, in the assessment of the value for money of this project by making use of the PSC, the PFI option did result in better value for money in financial terms than a traditional approach.

15. Was there any form of feedback to the output specs in order to influence the eventual outcome of the assessment of value for money?
   - Yes
   - No
   If “Yes”, to what extent were the output specs adjusted?
16. Did the long/short list tenderers expressed any comments/feedback during the consultation stage (after formal tender issue!) that led to substantial modifications in the output specs?
   □ Yes
   □ No
   If "Yes",
   16a To which parts of the output specs did these comments relate? Concerning the:
   □ Form (exterior and interior building)
   □ Functions (specific areas, facilities, internal transport)
   □ Qualities (safety, energy expenditure, climate)

16b To what extent is the output specification modified?

Contents of the output specification

In the ideal situation, the contents of the output specs are fully (100%) "output-driven". Through this, the private consortium has maximum opportunities/freedom to come up with creative and innovative solutions that comply with the output specs. However, several characteristics of the project can restrict the degree of output-orientation of output specs. For example, the complexity of a project (e.g. hospital) or the future users may require to lay down certain design solutions in advance.

17. What is the degree of "output-orientation" (restrictions on output) of the output specs of this project?
   □ 100% output-oriented
   □ 80% output-oriented
   □ 60% output-oriented

18. With reference to the previous question: To what extent had the design work (accompanying the output specs) progressed before formal tender issue?
   □ Artist impressions
   □ Conceptual level (only primary measurements)

19. Is there a particular decomposition philosophy regarding the contents of the output specs? In other words: How are they build-up?

20. Are rectification periods (acceptable time to fix faults) for service failure set out in the output specs?
   □ No
   □ Yes

21. Did any market consultation take place before formal tender issue in order to find out the practicability/feasibility of requirements in the output specs?
   □ No
   □ Yes
   If "Yes", what was the result of this market consultation?
Monitoring of performance standards

PFI contracts are typically based on the premise that the public Employer does not pay for a service until that service is provided by the private consortium and it meets the in the output specification determined performance standards. Therefore, these standards form the starting point for establishing appropriate monitoring techniques. So in PFI the performance monitoring and payment-regime are linked. Through monitoring, the service delivery levels are measured against the public sector’s desired performance standards. In case of poor performance by the private consortium or lack of availability of a service, the public Employer can apply a financial penalty.

22. What are the responsibilities of the public Employer and private consortium in monitoring the performance standards?
   - The private consortium needs to design the monitoring methods itself (self-monitoring, for providing evidence of acceptable service delivery)
   - The Employer establishes its own monitoring team to ensure whether the consortium meets its contractual obligations and to verify its performance reporting
   - Other, ...

23. What monitoring methods/ techniques are used in this project?
   - Continuous recording: real time information systems (temperature/humidity)
   - Random spot checking of cleaning, safety and security standards (check list)
   - Helpdesk: for reporting of service failures by users and issuing work orders
   - Other, ...

24. By whom are the monitoring methods of question 22 executed?
   - Private consortium
   - Employer
   - Third parties

25. Are in monitoring methods quality procedures used?
   - Yes
   - No
   If “Yes”, can you please explain more about these procedures?

26. How does the periodical payment mechanism (payment for delivery of quality performance, usage of financial penalties) exactly work?

27. Do you think the payment mechanism of question 25 proves to be a useful tool in achieving value for money?
   - Yes
   - No
   If “No”, what is the reason for this?

28. How is the handling of conflicts regarding financial penalties incorporated into the PFI contract?
Flexibility in the output specification

It is important for the Employer to retain a certain level of flexibility in the delivery of services. Over a long-term contract period (20 to 30 years), the service needs of the public authority may develop significantly (regarding for example ICT applications). Obviously, this has implications for the service specifications agreed in the PFI contract under which the private consortium commits to provide a particular service.

29. How is dealt with the need of the public Employer for flexibility in the output specifications because of change of scope of the services?

30. In implementing changes in the service delivery by the private consortium, how is taken care of sufficient competition in favour of the value/cost ratio?

Experiences with working with the output-oriented PFI contract

31. Are you satisfied so far with working with/ the results of the PFI contract, regarding:
   - Co-operation between the Employer and consortium
   - Quality of:
     - Design
     - Construction
     - Operation

32. Do you think, compared to a traditional approach, better value for money is achieved in the design and construction stages and as far as is applicable to the operational stage of the project?
   - Yes
   - No
   If “No”, what is the reason for this?

33. What are the lessons learned, regarding the in question 31 summed up aspects, that can be used in future PFI works?

34. Have you worked with the PFI procurement procedure in practise before?
   - Yes
   - No
   If “Yes”, can you comment on the learning effect?