The Dynamics of Inter-organisational Governance:
Contractual and Relational Mechanisms in Public-Private
Supply Arrangements

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A thesis submitted for the degree of
Doctor of Philosophy
University of Bath
School of Management

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ABSTRACT

This research investigates the dynamic interplay of contractual and relational governance mechanisms in long-term supply arrangements. The thesis contributes to an emerging debate that examines the combination of contractual and relational governance in inter-organisational exchanges. Contractual and relational governance mechanisms have been positioned as precluding mechanisms, which may result in destructive effects if combined for governing inter-organisational relationships. Previous research studies have increasingly acknowledged that the use of contractual mechanisms does not exclude the use of relational mechanisms and vice-versa. However, the recent literature offers limited insights into the dynamic interaction of both inter-organisational governance mechanisms and their impact on overall performance.

The analysis in this research utilises a conceptual framework and a number of theoretical lenses through which the dynamic interplay of contractual and relational governance mechanisms is explained. Based on empirical case analysis of six public-private supply arrangements across three sectors: healthcare, waste management and emergency services, the research explores the dynamic interplay of both governance mechanisms and their impact on overall performance. Retrospective case study data was collected deploying semi-structured interviews and the critical incident technique was used to investigate the governance interplay over time.

The contribution to knowledge is a conceptual framework that refines contractual and relational governance components in supply relationships over time. The findings indicate the importance of the interplay between inter-personal and inter-organisational trust in combination with complex contracts and intermediate contractual agreements. From this the conclusion is drawn that organisations entering into long-term supply relationships need to deploy both contractual and relational governance mechanisms in combination in order to achieve better overall performance.
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LIST OF ABBREVIATIONS

4Ps       Public Private Partnerships Programme
ACR      Adversarial Contractual Relationship
CBI      Confederation of British Industry
CEO      Chief Executive Officer
CIT      Critical Incident Technique
CTR      Contractual
DBFO    Design, Build, Finance and Operate
DEFRA    Department of Environment, Food and Rural Affairs
DoH      Department of Health
EfW      Energy from Waste
e.g.  exempli gratia (Latin); for example
etc.  et cetera (Latin); and the rest, and so forth
EU      European Union
FM      Facilities Management
H.M. Treasury  Her Majesty's Treasury
HR      Human Resources
i.e. id est (Latin); that is
IFSL    International Financial Services London
IMP    Industrial Marketing and Purchasing
IT      Information Technology
MD      Managing Director
NAO    National Audit Office
NHS    National Health Service
NPM    New Public Management
OCR    Obligational Contractual Relationship
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<td>OGC</td>
<td>Office of Government Commerce</td>
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<td>OJEU</td>
<td>Official Journal of the European Union</td>
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<td>PFI</td>
<td>Private Finance Initiative</td>
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<td>PFU</td>
<td>Private Finance Unit</td>
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<td>PPP</td>
<td>Public Private Partnership</td>
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<tr>
<td>RELN</td>
<td>Relational</td>
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<td>SCM</td>
<td>Supply Chain Management</td>
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<td>SCT</td>
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<td>SPV</td>
<td>Special Purpose Vehicle</td>
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<td>Transaction Cost Economics</td>
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<td>TUPE</td>
<td>Transfer of Undertaking Protection of Employment</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>WCA</td>
<td>Waste Collection Authority</td>
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<td>WDA</td>
<td>Waste Disposal Authority</td>
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<tr>
<td>WEEE</td>
<td>Waste Electrical and Electronic Equipment</td>
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CHAPTER ONE: INTRODUCTION

1.1 Introduction to the Research

This research explores the different mechanisms of inter-organisational governance as they interact over time. Specifically, a novel perspective is proposed on the dynamic interplay between the contractual and relational mechanisms that comprise inter-organisational relationships (Poppo and Zenger, 2002; Klein Woolthuis et al., 2005). Further, the aim of the thesis is to contribute to the emerging debate on the interplay of inter-organisational governance by examining the combination of contractual and relational governance mechanisms of exchange between partners (North, 1990; Larson, 1992; Uzzi, 1997; Poppo and Zenger, 2002; Halldórsson and Skjøtt-Larsen, 2006; Zhou and Poppo, 2006; Vandaele et al., 2007). Although researchers have increasingly come to acknowledge that the use of contractual mechanisms does not in effect exclude the use of relational mechanisms and vice-versa, thus accepting that instead of being substitutes these mechanisms are complements (Poppo and Zenger, 2002), the exact nature of this interaction, and in particular its dynamics, remains under-researched (Klein Woolthuis et al., 2005).

The following aim and objectives were developed. Given that the overall aim of this research is to explore the dynamics of contractual and relational mechanisms of inter-organisational governance, four specific research objectives are set as follows.

1. Examine the role of contractual governance in supply arrangements over time.

Contractual governance in this research refers to the collection of those deliberate inter-organisational mechanisms that are manifested in formal (i.e. contractual and enforceable by law) arrangements. Such phenomena can be explicitly observed in the form of written documents and include, for instance: service level agreements and concession agreements. The second research objective sets out to:

2. Examine the role of relational governance in supply arrangements over time.
Relational governance in this study refers to the collection of mechanisms that are manifested in socially derived arrangements, such as: norms, custom and practice. These phenomena are not, for the most part, directly accessible through written documents. Further, they include social processes that promote: norms of flexibility, solidarity, personal bonding and implicit understandings and are not necessarily sanctioned through formal positions (i.e. courts). Having investigated the distinct roles of contractual and relational governance mechanisms across the buyer-supplier dyad over time, the third research objective sets out to:

3. Examine various combinations of these governance mechanisms at different points in time.

Contractual and relational governance combinations are investigated across different points in time during the long-term supply relationship. Both governance mechanisms are assigned different scores ranging from low to medium to high significance, resulting in various governance combinations over time. Finally, the fourth research objective is concerned with the dynamic trajectories of these different mechanisms of inter-organisational governance and sets out to:

4. Examine the impact of different governance trajectories on overall performance.

Inter-organisational governance trajectory in this study refers to the path that contractual and relational governance mechanisms and their interplay take over time. Overall performance in this research is assessed using a composite measure that examines satisfaction with the overall performance, including financial (on budget) and operational (on time) performance measures.

1.2 Research Context

In order to achieve the above research objectives, it is necessary to identify a setting that provides an opportunity to investigate contractual and relational governance mechanisms over time. From a methodological standpoint, it is essential to collect empirical data that relates to an extended period of time, so as to obtain meaningful observations regarding the interplay of the governance mechanisms. The focus for the empirical analysis needs to take into consideration the sensitivity of contractual
agreements, thus ethical issues need to be addressed when choosing the cases. In this study, the empirical background to this research is public-private supply arrangements in the United Kingdom (UK).

Responsibility for the provision of public infrastructure and services has traditionally resided with the government (Dixon et al., 2005). However, throughout the 1980s and 1990s, the UK in particular, introduced a number of initiatives that aimed to bring the private sector into activities once thought the sole preserve of government. First, this occurred through the programme of privatising state-owned industries and the contracting out of public sector activities. Then later this was extended to the use of private sector management and funding for public sector projects, through the Private Finance Initiative (Office of Government Commerce, 2002). Two types of long-term buyer-supplier relationships are Public Private Partnerships (PPP) and Private Finance Initiatives (PFI), both bringing together public and private partners for procuring public sector projects and delivering associated services (Broadbent and Laughlin, 2003). These long-term relationships form the context of this research study as they offer a unique opportunity to review governance mechanisms over an extended life cycle of up to 30 years.

According to H.M. Treasury (2000), the PPP label covers a wide range of different types of partnerships, including the most commonly found public-private investment vehicle in the UK, the Private Finance Initiative. The PFI was considered to be an integral part of New Public Management (NPM) Reform (Broadbent and Laughlin, 2005), which aimed to achieve a higher efficiency level, by drawing on expertise and managerial input from the private sector (Hood, 1995). The Private Finance Initiative, which first deployed in 1992 by the Conservative administration, has come to dominate the procurement of capital projects and provision of many associated services in the UK (Froud, 2003; Broadbent and Laughlin, 2005). Such projects are typified by private organisations borrowing funds to build long-term infrastructure, and then operating and managing it on behalf of the public sector. In addition, private sector organisations may provide services aligned with the infrastructure following an output specification from the public sector purchaser (Broadbent and Laughlin, 2003; Ball et al., 2002). The term also covers financially free-standing projects where the private sector supplier: designs, builds, finances and then operates an asset.
and covers the costs entirely through direct charges to the private users of that asset. Public sector involvement is limited to supporting the project through assistance with planning, licensing and other statutory procedures (Office of Government Commerce, 2002).

PFI projects differ from privatisation, owing to the fact that the public sector remains a key actor in the project, usually as its facilitator and the main purchaser of the services provided. Moreover, it differs from contracting-out as the private sector provides the capital as well as the services and in effect is seen as a way of providing the resources that are necessary to modernise the public sector. PPP and PFI projects established to date, include: hospitals, schools, prisons, IT systems, roads, bridges, defence contracts and the modernisation of government estates. By March 2008, PFI contracts for the construction of: schools, prisons, bridges, hospitals, roads and military equipment included 625 projects which accounted for a capital value of £58.7 billion (H.M. Treasury, 2008).

1.3 Initial Conceptual Framework

This section sets out the initial conceptual framework and the central research question.

**Figure 1** Initial conceptual framework

The initial conceptual framework describes how this study is set out so as to examine the role of contractual governance, the role of relational governance and the interplay of contractual and relational governance in buyer-supplier relationships over time.
Figure 1 depicts the initial conceptual framework that distinguishes between the core areas of interest. That is, how contractual and relational governance mechanisms interact over time in a dyadic supply relationship between public buyer and private supplier. This initial conceptual framework addresses the central research question which is:

*What are the dynamics of contractual and relational governance mechanisms in supply arrangements?*

### 1.4 Structure of the Thesis

This chapter has introduced the background of the research, the aim and objectives of the study, and the initial conceptual framework. The following Figure 2 shows the structure of the thesis.

![Figure 2: Structure of the thesis](image)

*Chapter Two: Literature Review and Conceptual Framework* – synthesises the relevant literature in order to define the focus for this research. A more detailed discussion on the constructs mentioned in this chapter is provided, in order to build up a comprehensive framework for this study. The chapter comprises a literature survey on buyer-supplier relationships and a critical review of current theory.
pertaining to contractual governance, relational governance and their interplay. In addition, the conceptual framework is developed from which further research questions are derived.

*Chapter Three: Research Philosophy and Methodology* – describes and justifies the research philosophy and methodology deployed to address the research: aim, objectives and the research questions. Owing to the current lack of evidence to answer the research questions formulated in this study, it is proposed that exploration of the concepts is undertaken through the use of multiple case studies. In this context, the chosen case study design and the data collection methods are justified. In addition, the research credibility measures are outlined and the data analysis steps are discussed.

*Chapter Four: Case Findings* – presents the results of the empirical investigation across the six investigated cases. Each case is introduced by providing a brief description of its background and a graphic representation of the identified events. Then, these identified events are presented along the project phases: bid/contract negotiation, build and operate, supported by interview quotes from both the buyer and supplier side. The last section of each case summarises the events and examines the: contractual governance, relational governance and the governance interplay over time.

*Chapter Five: Cross Case Analysis* – provides a cross case analysis by comparing the findings across the investigated cases. These findings are discussed in order to shed more light on the appropriateness of the research questions and the conceptual framework posited above in Figure 1.

*Chapter Six: Discussion* – reflects on the research findings by revisiting the research questions and the conceptual framework. In addition, the findings are discussed in the light of the existing literature previously outlined.

*Chapter Seven: Conclusions and Reflections* –discusses the contribution of the research and outlines the research limitations. The chapter presents the theoretical and practical implications of this study and concludes with suggestions for future research.
1.5 Chapter Summary

This chapter has provided the background to this thesis by presenting: the research introduction, research aim and objectives, the research context, the initial conceptual framework and an outline of the thesis structure. The following chapter examines the research concepts introduced in the initial conceptual framework.
CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Introduction to Chapter

This chapter reviews the background literature that supports the development of the research questions and the initial conceptual framework. Section 2.1 examines supply relationships from the transaction cost economics (TCE) and social capital theory (SCT) perspectives. Sections 2.2 and 2.3 classify and characterise contractual governance and relational governance mechanisms. The dynamic interplay of contractual and relational governance mechanisms are examined in section 2.4. Section 2.5 integrates the sections of the literature review to develop the initial conceptual framework and the research questions.

Figure 3  Structure of Chapter Two: Literature review and conceptual framework
2.1 Buyer-Supplier Relationships: A Conceptual Framework

In order to provide a research setting for contractual and relational governance mechanisms, supply relationships are defined in general before expanding the thinking regarding relationships to include transaction cost economics (TCE) and social capital theory (SCT).

2.1.1 Supply chain management: Management of buyer-supplier relationships

Over the last two decades, increasing global competition has forced organisations to offer low cost, high quality and reliable products with greater design flexibility. Moreover, manufacturers have come to realise the potential benefits and importance of strategic and cooperative partnerships between suppliers and buyers (Lamming, 1993; Hines, 1994; Tan, 2001; Tan et al., 2002). Thus, traditional purchasing and logistics functions have been merged into a broader strategic approach to material and distribution management known as supply chain management (SCM). The terms supply chain management and supply management are both deployed in a similar manner in the literature (Carter and Ellram, 2003). SCM encompasses the entire supply chain and addresses materials and supply management as well as the management of multiple relationships across the supply chain. According to Lambert and Cooper (2000), “SCM is the integration of key business processes from end user through original suppliers that provide products, services and information that add value for customers and other stakeholders” (p.66). Most definitions link SCM to the integration of systems and processes within and between organisations, which include the upstream suppliers, and the downstream customers.

There is little consensus regarding the use of the concept of supply chain management in the extant literature. Some authors deploy the term to describe strategic, inter-organisational issues (Cox, 1997), some to discuss an alternative organisational form to markets and vertical integration (Thorelli, 1986; Ellram, 1991; Christopher, 1998; Croom et al., 2000), whilst others use it to describe the relationship between a buying company and its suppliers (Sako, 1992; Lamming, 1993). Furthermore, SCM can be considered at the “macro” level, the market, and at the “micro” level, the single organisation. The “macro” level evolved with the theory of the firm developed by Coase (1937) and considers SCM as an alternative
relationship type to pure market and vertical integration whereas on the other hand
the “micro” level perspective is related to the development of closer relationships,
labelled partnerships, between the buyer and its major suppliers. The latter
perspective is accompanied by an attitudinal shift in behaviour towards suppliers,
labelled ‘lean supply’ (Lamming, 1993; Hines, 1994).

![Diagram of Levels of Research in Supply Chain Management]

**Figure 4** Levels of research in supply chain management
(*adapted from Harland, 1996, p.872*)

Supply chain management has been considered from various levels of analysis,
ranging from a network, to a supply chain, to a dyadic supply relationship, and to an
internal chain as illustrated by Figure 4 (Harland, 1996). Networks are defined as
“sets of connected exchange relationships between actors controlling business
activities” (Forsgren and Johanson, 1992, p.5). This definition is closely linked to the
Industrial Marketing and Purchasing (IMP) group, who propose that a network
consists of actors, activities and resource elements which are mutually
interdependent (Håkansson, 1987). Moreover, from this perspective relationships and
networks of relationships are created as organisations construct actor bonds, activity
links and resource ties.

Another level of analysis is an organisation’s external chain (or supply chain). This
has been described as a chain linking each element of the manufacturing and supply
process from the raw material through to the end user, crossing several organisational boundaries (Scott and Westbrook, 1991; New and Payne, 1995). Christopher (1998) defines a supply chain as “a network of organisations involved in upstream and downstream linkages in different processes and activities that produce value in the form of products and services in the hands of the ultimate customer” (p.15). In contrast to the other three levels of research illustrated in Figure 4, the internal chain considers an organisation’s internal value stream. Another level of analysis in SCM, the dyadic relationship between buyer and supplier organisations has been adopted as the unit of analysis in this research study. Therefore, the following sub-section examines long-term buyer-supplier relationships.

2.1.2 Managing long-term supply relationships

The complex nature of many transactions requires the formation of long-term supply relationships (Lamming, 1993; Reck and Long, 1988). In this vein, parallel to the move towards supply chain management and collaborative relationships, there has been a shift towards long-term buyer-supplier relationships. Research studies conducted during the 1990s in the automotive industry indicated positive impacts associated with moves towards long-term, close relationships. In particular, this was illustrated by the competitive advantage gained by Japanese car manufacturers over their competitors from Western Europe and North America, when they employed this strategy (Sako, 1992; Dyer and Ouchi, 1993). However, only a limited number of studies into the management of long-term relationships are explicit about the length of such relationships. For instance, Helper (1991) reports that the average duration of contracts in long-term relationships in the U.S. increased to 2.3 years in the late 1980s. A study by Dyer (1996) reports that automobile companies are now letting supply contracts for 3 to 5 years which represents the current car model life cycle.

In contrast, relationships between public and private organisations, such as Public Private Partnerships (PPPs) and Private Finance Initiatives (PFIs), are typified by long-term contracts spanning 30 years or more. PFI projects are characterised by private organisations borrowing funds to build long-term infrastructure, and then: designing, building and operating it on behalf of the public sector. In addition, private sector organisations may also provide services aligned with the infrastructure following an output specification from the public sector purchaser (Broadbent and
Laughlin, 2003; Ball et al., 2002). The costs of building and maintaining the infrastructure are covered entirely through charges to the public sector throughout the infrastructure life cycle. PFI projects comprise the design, build, finance and operate (DBFO) aspects of, for instance: hospitals, schools, prisons, roads and bridges.

By adopting a TCE perspective on long-term, inter-organisational relationships, buyers and suppliers may conduct repeated transactions over time, leading to long-term exchanges in a transactional mode (Khalwani and Narayandas, 1995). These durable arm’s-length relationships are typified by less communication, fewer relationship-specific investments than long-term relationships, but frequent price benchmarking (Dyer et al., 1998). Moving away from this transactional mode, Macneil (1980) argues that there are various conditions under which organisations can establish close, collaborative inter-organisational relationships. For instance, previous research pointed out that organisations can signal a tendency to maintain a relationship over time through investing in relationship-specific assets (Anderson and Narus, 1990). That is, organisations investing in resources specific to this exchange demonstrate a willingness and commitment towards the buyer-supplier relationship.

Management literature describes various concepts for encouraging long-term relationships such as: collaboration and cooperation. Close, collaborative relationships are characterised by: joint actions, expected continuity and substantial relationship-specific investments (Heide and John, 1990). Cooperation in long-term relationships is achieved through coordinated activities, which are performed by the buyer and supplier to produce mutually expected outcomes over time (Anderson and Narus, 1990). Long-term orientation is also referred to as “commitment” which often leads to increased mutual profitability of the buyer and supplier organisations (Anderson and Weitz, 1992). Therefore, frequent interaction, constant monitoring and the establishment of inter-personal liaison between employees of both organisations are crucial in collaborative relationships (Araujo et al., 1999). In fact, much of the extant literature illustrates the importance of frequent communication involving personal contacts between buyer and supplier personnel in long-term relationships (Chen and Paulraj, 2004). Moreover, close relationships constitute of partners willingness to share risks and rewards and to maintain relationships over a longer period of time (Cooper and Ellram, 1993; Stuart, 1993). Collaborative
relationships are also typified by mutual dependency (Tan et al., 1999; Gadde and Snehota, 2000), and coordination, adaptation and interaction costs among organisations (Cousins and Lawson, 2007). However, the investment-intensive nature of long-term, close relationships allows for only a limited number of such relationships to be maintained by a single organisation (Gadde and Snehota, 2000; Cousins and Lawson, 2007).

The literature on supply relationship management offers various classification models for the management of buyer-supplier relationships (e.g. Kraljic, 1983; Bensaou, 1999; Lambert et al., 1996). All these models have in common the fact that they focus on the relationship at a specific point in time, adopting a rather static approach to relationship management. Hence, these models only offer a limited time perspective on the long-term dynamics of buyer-supplier relationships. By contrast, taking into consideration the changing nature of long-term relationships, development models (as opposed to classification models) describe these relationships by using a predetermined set of phases (Ford, 1980; Ring and Van de Ven, 1994; Dwyer et al., 1987). In this context, these models describe relationships as evolving through similar stages, such as (i) awareness, (ii) exploration, (iii) expansion, (iv) commitment, and (v) the dissolution stage (Dwyer et al., 1987) or (i) pre-relationship, (ii) early, (iii) development, (iv) long-term, and (v) the final stage (Ford, 1980). Relationship models also consider, for instance, interaction and communication levels between actors, resource commitment and sharing at each stage. Although these models recognise the long-term nature of buyer-supplier relationships and their development over time, they only offer a limited evidence base of relationship governance dynamics. The following sub-section reviews buyer-supplier relationship approaches.

2.1.3 Buyer-supplier relationship approaches

In the search for competitive advantage, the need for closer relationships between supply chain members has been a central research aim of SCM (Lamming, 1996; Macbeth and Ferguson, 1994). A generic definition of inter-organisational relationships is provided by Oliver (1990), describing relationships as “relatively enduring transactions, flows and linkages that occur among or between an organisation and one or more organisations in its environment” (p.241). Lamming
(1993) describes relationships as a quasi-firm, whilst others describe them as processes with a specific outcome (Cousins, 2002).

**Figure 5** Types of relationship

*(adapted from Harland, 1996, p.S65)*

Figure 5 provides a summary of the types of relationships that are possible along a continuum of integration from market to hierarchy. This continuum is consistent with the TCE perspective of the boundary of the firm being a decision variable, along which a number of forms exist between the polar forms of pure market transactions and integration (or acquisition), involving various hybrid forms as shown in Figure 5 (Williamson, 1975).

Since organisations shifted from a purchasing perspective towards supply management, with a strategic perspective on buyer-supplier relationship management, various relationship management approaches have been developed. The Industrial Marketing and Purchasing (IMP) group investigates relationships between the customer and the supplier (Håkansson, 1982; Ford, 2002). The interaction approach proposed by IMP scholars represents a significant development when compared to previous approaches that concentrated on individual transactions by combining a short- and long-term view of relationships. This group studies institutionalised roles, continuous supply and general dyadic relationships. Moreover, customer and supplier organisations are considered to be active rather than reactive parties in a relationship. The interaction process is divided into episodes, described as product/service exchange, information exchange and social exchange, and relationships which are described as institutionalised, contact patterns and adaptations (Håkansson, 1982). Further, from this perspective, interactions between organisations are considered as being influenced and shaped by individuals in organisations with their own aims and experiences as well as the interaction environment (Håkansson and Ford, 2002). Therefore, to these authors buyer-supplier relationships are not seen as isolated dyadic relationships, but as related to other
relationships in a network context and as evolving over time. The IMP scholars’ findings show that as interaction practices become institutionalised, the interaction costs tend to reduce.

Building on the IMP research, Araujo et al. (1999) identify four different types of relationships which deploy the notion of interfaces between customers (buyers) and suppliers by adopting a customer focused perspective on assessing the supplier’s resources. In this vein, these authors conclude that buyers need a range of different interfaces in order to be productive and innovative, as shown in Table 1 (Araujo et al., 1999).

<table>
<thead>
<tr>
<th>Interfaces</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardised</td>
<td>Products are standardised; no knowledge exchange is needed</td>
</tr>
<tr>
<td>Specified</td>
<td>Customer provides product blueprint</td>
</tr>
<tr>
<td>Translation</td>
<td>Supplier interprets the needs (functional characteristics) of the customer</td>
</tr>
<tr>
<td>Interactive</td>
<td>Design and manufacturing parameters are open-ended; constant knowledge exchange (leads to joint learning)</td>
</tr>
</tbody>
</table>

Table 1 Interfaces and their characteristics
(adapted from Araujo et al., 1999)

Sako (1992) distinguishes inter-organisational relationships along a range from adversarial contractual relationships (ACRs) to obligational contractual relationships (OCRs). The former are characterised by organisations adopting a short-term view on the buyer-supplier relationship (Lamming, 1993). In contrast, one of an OCR’s main determinants is the existence and degree of trust between organisations. Sako (1992) distinguishes between various degrees of predictability in behaviour, thus leading to three types of trust: contractual trust, competence trust and goodwill trust.

The trend in the supply management literature towards long-term relationships, typified by trust, is evident in a myriad of studies conducted in the 1990s and 2000s. For instance, Ghoshal and Moran (1996) argue that parties in buyer-supplier relationships in many cases have moved away from the basic premise of opportunism towards more collaborative and trusting relationships. This observation is supported by Giunipero et al.’s (2008) comprehensive literature review, illustrating that the number of research studies on trust in buyer-supplier relationships increased dramatically over the last decade. A more detailed discussion on trust is presented under sub-section 2.3.1.
As previously described, authors in the supply chain management field have described different types of relationships along a continuum from adversarial, intermediate, partnership to network relationships (Hoyt and Huq, 2000; Goffin et al., 2006). Moreover, many research studies acknowledge that organisations need to develop different relationships within their supplier base, thus leading to a “portfolio” approach to relationships (e.g. Bensaou, 1999; Olsen and Ellram, 1997). Management scholars have also observed the potential advantages of collaborative, close buyer-supplier relationships over arm’s-length trading arrangements (Håkansson, 1982; Lamming, 1993; Heide and John, 1990; Zaheer et al., 1998). Furthermore, the notion of trust in buyer-supplier relationships has become a vital part of relationship management and research.

A number of different conceptual approaches to inter-organisational relationships exist in the extant literature, such as transaction cost economics (Williamson, 1975) and social capital theory (Bourdieu, 1986). These approaches to inter-organisational relationships differ in their views of the characteristics of inter-organisational relationships. Whilst the TCE approach attaches little importance to the role of human interfaces in buyer-supplier exchanges, social capital theory emphasises their importance. This latter approach is closely related to relationship perspective in the SCM field that emphasises the relational components of buyer-supplier relationships and the positive impact of collaborative and trusting interactions (Ellegaard et al., 2003). Buyer-supplier relationships, from a SCM perspective, can therefore be characterised as an exchange between two organisations that involves not only transactions, but also social elements. In the following sub-sections transaction cost economics (TCE) and social capital theory (SCT) will be reviewed as two possible lenses for the study of supply relationships.

### 2.1.4 Description and critique of transaction cost economics

Transaction cost economics offers an economic framework to understand the existence of firms and why some activities are left for market transactions and others are integrated into the firms (Williamson, 1975; Jacobides and Winter, 2005). The understanding of transaction costs leads to an understanding of what firms buy, produce or sell and thereby allows for analysis of their size and nature of their existence. Proponents of TCE adopt the single transaction as the basic unit of
analysis and proclaim that firms need to economise on their transactions to become more efficient (Williamson, 1975). This logic is justified by accepting the rule that if the costs to organise transactions through the market are greater than the costs to coordinate the activities centrally, then the firm (later defined as a hierarchy in the literature) will emerge to carry out these activities (Coase, 1937). Transaction cost economics was further refined by Williamson (1975) arguing that firms should not be conceived as merely production functions, but investigation into their transactions should also be made if they are to be effectively understood.

Transactions are considered as the exchanges of goods or services between economic actors, who are technologically separate units, inside and/or outside the organisation (Williamson, 1985). That is, “transaction cost economics adopts a contractual approach to the study of economic organisation” (Williamson, 1996, p.54). Transaction costs include ex ante costs, such as drafting and negotiating contracts and ex post costs such as monitoring and enforcing contracts. TCE rests on two main assumptions of human behaviour: bounded rationality and opportunism and three key dimensions of transactions: asset specificity, transaction uncertainty and frequency (Williamson, 1975). Assuming limited cognitive capabilities of human decision makers, bounded rationality is an important concept in understanding the actions of firms. The concept states that managers’ decision-making and planning capabilities are limited by their knowledge and information asymmetry (Simon, 1957).

Hart (1995) argues that assuming perfect planning were possible, contracting exchange parties face problems in developing a common language to describe actions. Hence, difficulties arise for a third-party enforcer (e.g. courts) to verify contracting parties’ claim in the event of a dispute (Lewis and Sappington, 1991). Thus, the contracting parties are faced with incomplete contracts (Macher and Richman, 2008). A contract is considered complete “when it differentiates among all relevant future states of the world and a third party, such as a court, can verify which state occurred when that is necessary” (Eggleston et al., 2000, p.9). Contractual incompleteness leaves parties vulnerable to calculated opportunistic efforts by their exchange partner or “self-interest seeking with guile”, the second key assumption regarding human behaviour (Williamson, 1975, p.26). In other words, under such
circumstances the exchange parties face incomplete, imperfect or asymmetrical information which can lead to opportunistic behaviour (Hobbs, 1996).

TCE also contains the assumptions that decision-makers act opportunistically and that contracts are needed to control for the influence of these human factors in the market. Williamson (1975) argues that hierarchies (firms) can mitigate the impact of bounded rationality and opportunism on transactions costs. Thus, internalising activities to the firm and not obtaining them from the market will reduce the extent to which costly, complex contracts and monitoring activities are needed (Williamson, 1975). Contract complexity is dependent on the “number of contingencies in a contract, and the number of decisions stipulated in each contingency” which collectively define the length of the contract (Melumad et al., 1997, p.264). That is, complex contracts should have many terms describing the contracting parties’ obligations across a number of contingencies. The length of the contract in terms of the number of pages has been deployed by previous studies as an indicator of contractual complexity (Joskow, 1988; Poppo and Zenger, 2002). These complex contracts, involving more contingencies and stipulating more decisions in each contingency, are costlier to draft and to enforce as they take third parties, such as the courts, more time and effort to comprehend (Melumad et al., 1997). Moreover, the drawing up of complex contracts involves the costs of: negotiating, bargaining, drafting, and reaching agreement on the various contractual terms (Macaulay, 1963).

Furthermore, three key dimensions of transactions: asset specificity, transaction uncertainty and transaction frequency, affect the impact of bounded rationality and opportunisms. Each of these three factors raises the effort and cost of structuring an agreement (contract) between buyer and supplier, as the contracting parties seek to mitigate their effects. Asset specificity arises when one firm in an exchange has invested resources specific to that exchange which have little or no value in an alternative exchange. In this vein, Williamson (1985) states that opportunism is more likely if the buyer and supplier are locked-in through assets which are specific to the transaction. Therefore, costs to control opportunism are less if firms internalise transaction co-ordination instead of dealing with volatile and risky market transactions.
The TCE literature distinguishes between: site specificity, physical asset specificity, human asset specificity and dedicated asset specificity, as the different forms of asset specificity (Williamson, 1985). Specific assets in combination with environmental and behavioural uncertainty lead to high complexity, frequent monitoring of contractual performance and the drafting of costly agreements which may also face high renegotiation costs through the time of the transaction (Williamson, 1985). In contrast, transaction frequency it is argued reduces the cost impact of asset specificity and uncertainty factors. In other words, repeated transactions will reduce the costs associated with asset specificity and the risk of opportunism (Williamson, 1985).

Various intermediate forms (hybrids) between market and completely vertically integrated firms offer alternative coordination possibilities for economic activities (Williamson, 1991; Hobbs, 1996). These different forms of vertical coordination can be represented by the degree of vertical integration and the extent of cooperative behaviour in the relationships (Grover and Malhotra, 2003) and are central to the study of supply chain management (Hobbs, 1996). One of the most common applications of the TCE framework is the study of vertical inter-organisational relationships in the context of various business disciplines such as: marketing, strategic management and strategic supply management (e.g. Dyer, 1996; Dyer and Singh, 1998; Grover and Malhotra, 2003). Within this stream of TCE research, scholars have, for instance, explored the use of contractual arrangements, such as Joskow’s (1987) study on the function of asset specificity on the length of contracts in the mining industry.

**Critique of TCE**

A number of criticisms have emerged which should be taken into consideration when applying TCE. First, the two behavioural assumptions of TCE: bounded rationality and opportunism, have received much criticism. Ghoshal and Moran (1996) challenge the TCE view that opportunism is prevalent and leads to increased transaction costs. Their study shows that opportunism may not be as widespread as predicted by proponents of TCE and the extent of this phenomenon varies substantially across firms. This view is supported by Barney (1990), stating that only some economic actors behave opportunistically, whilst recognising the difficulties in
identifying these ex ante. In other words, the TCE framework does not adequately address the role of trust in inter-organisational relationships (Ring and Van de Ven, 1992). Bounded rationality has often been misinterpreted as “an indication of stupidity on the part of the economic actor” (Rindfleisch and Heide, 1997, p.48). In fact, it should be interpreted as certain physical limits that exist on the human ability to: receive, store, retrieve, and communicate information without error and thus being unable to predict and plan accurately for all contingencies (Simon, 1957).

The notion of transaction costs has been criticised for not being easy to distinguish from other occurring managerial costs owing to market and firm complexity, thus impacting on its limited measurability and quantification (Hobbs, 1996). As a consequence, Grover and Malhotra (2003) argue that it is nearly impossible to arrive at an accurate representation of transaction costs from financial data. A further criticism of TCE and its associated empirical studies arises from its main focus on how individual relationships or transactions are organised at a given point in time (Nooteboom, 1992). That is, the TCE viewpoint on single transactions and relationships neglects the temporal nature of inter-organisational relationships (Rindfleisch and Heide, 1997). Various studies have criticised the preoccupation of the theory with the economic conditions that drive firms to organise relationships in a particular way, thereby neglecting other mechanisms and processes, such as trust and commitment, that influence and shape inter-organisational relationships (Heide and John, 1992; Zaheer and Venkatraman, 1995; Gulati and Singh, 1998; Joshi and Stump, 1999; Macher and Richman, 2008).

2.1.5 Description and critique of social capital theory

TCE has been criticised for not addressing social mechanisms, such as trust in long-term inter-organisational relationships and hence providing an incomplete framework in understanding their formation (Ghoshal and Moran, 1996). Social capital theory (SCT) has gained prominence in inter-organisational relationships and network governance research (e.g. Ramstroem, 2008; Das and Teng, 1998; Dyer and Singh, 1998; Zaheer et al., 1998). The theory posits that networking relationships bring value to actors, such as individuals or organisations, by them accessing resources embedded in those relationships (Bourdieu, 1986). In other words, SCT refers to connections within and between social networks as well as connections among
individuals, arguing that social contacts affect the productivity of individuals and groups.

SCT is not a unified social theory, but rather a set of related descriptions and propositions. Its development was influenced by diverse literature streams, such as those of early social exchange theorists (e.g., Blau, 1964) and critics of neo-classical economics (e.g., Granovetter, 1985). Social capital theorists, such as Coleman (1988) criticise the “under-socialised” viewpoint of neo-classical economic theory, wherein humans are portrayed as profit-maximising, independent actors. He also challenges the “over-socialised” view of earlier literature in sociology, illustrating humans as possessing no “engine of action”. That is, Coleman (1988) recognises that human nature consists of rational action and self-interested orientation, but he also argues that it is affected by social structures. He describes social capital as a mechanism for creating human and physical capital. Social capital has been defined as “the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition” (Bourdieu, 1986, p.248). Baker (1990) defines the concept as “a resource that actors derive from specific social structures and then use to pursue their interests; it is created by changes in the relations among actors” (p.619).

Gabbay and Leenders (1999) introduce the concept of corporate social capital (CSC), as referring to the social capital of corporate players, namely firms and their members. They define CSC as “the set of resources, tangible or virtual, that accrue to a corporate player through the player’s social relationships, facilitating the attainment of goals” (Gabbay and Leenders, 1999, p.3). CSC theory relates to the interconnections of structures at an individual and firm level and their impact on organisational outcomes. The notion of social capital has gained an increasing interest in many fields, because it is a productive asset that can be used to generate other forms of capital, including: financial, physical, and human capital (Bourdieu, 1986; Coleman, 1988). Depending on who receives the benefits, social capital has been considered either as a public good or as a private good (Leana and Van Buren, 1999). Coleman (1988) considers social capital mainly as a public good, arguing that
benefits accruing from social capital are distributed to all members in a social structure.

Social capital, in contrast to financial, physical, and human capital, is owned jointly by the members of a social network and cannot be traded easily (Nahapiet and Ghoshal, 1998). Moreover, as a private good this implies that benefits accrue directly to individuals. For example, Belliveau et al. (1996) studied how social capital affects a firm’s chief executive officer’s compensation. The consequences of social capital are manifold, leading to, for instance, an increased access to sources of information, reduction of transaction costs and the creation of new intellectual capital (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002). Additionally, on-going interactions and activities between actors shape the network, as proposed by IMP scholars (Batt, 2008; Håkansson and Ford, 2002).

Granovetter (1985) argues for incorporating the effects of social embeddedness in the analysis of economic transactions. The author distinguishes two types of embeddedness affecting economic action (Granovetter, 1992). That is, the structural aspect of embeddedness refers to properties of social networks as a whole, whereas the relational embeddedness is concerned with actors’ dyadic relations. The notion of embeddedness, stating that economic life is influenced and shaped by social relationships, remains a rather generic concept. Drawing on Granovetter’s (1992) distinction between structural and relational embeddedness, Nahapiet and Ghoshal’s (1998) study reports that social capital has three distinct, but inter-related dimensions, these being: structural, relational and cognitive. Whilst the structural dimension describes the impersonal pattern of connections between actors within the social network (social interaction ties), the relational dimension describes the quality of personal relationships as shaped by interactions in the past. Norms, sanctions, trust, obligations and expectations are key concepts of the latter dimension. The cognitive dimension refers to resources providing shared systems of meaning among parties such as shared codes and languages (Nahapiet and Ghoshal, 1998).

Along the same lines, Brunie (2009) argues that social capital is an umbrella concept that needs to be broken down “into more concrete and manageable elements” (p.252). This author distinguishes between three interrelated perspectives of social capital: relational, collective and generalised. While the relational perspective
emphasises how relations an actor builds and maintains with other actors can allow him/her to access valued resources, the collective approach focuses on the quality of relationships within a group. The generalised view considers social capital as an individual attribute, referring to individuals’ attitudes and behaviour (Brunie, 2009).

An important determinant in the formation of social capital in networks is the concept of “closure” and “ties” (Granovetter, 1973; Coleman, 1988). Closure is achieved when ties between people are strong enough to ensure the execution of norms for achieving positive effects of social capital, thus mitigating undesired behaviour. A combination of time commitment, the amount of reciprocal activities, and the level of friendship, needs to be engaged in order to achieve strong ties between human actors (Granovetter, 1973). However, there has been limited research into the costs associated with creating social capital. Although some forms of social capital are by-products of social processes, Leana and Van Buren (1999) argue that maintaining social capital requires intentional investments. Material and symbolic profits derived from network membership decrease over time, if no conscious efforts are made to (re-)establish social relationships (Bourdieu, 1986).

**Critique of social capital theory**

The main criticism of SCT relates to its vague definition and the argument that the processes addressed by the theory have been previously studied under different labels (Portes, 1998). Moreover, the theory has been criticised for focusing solely on the positive consequences of social capital, thus ignoring the inherent negative effects for individuals and groups. Portes (1998) identifies four negative consequences of social capital: (i) tight control executed by members of a social network may hinder access by outsiders, (ii) emergence of free-riding problems caused by group members, (iii) individual autonomy may be reduced and (iv) downward levelling norms may result in groups that are in opposition to mainstream society. Additionally, SCT has been criticised for creating “groupthink” relating to poor decision making and dysfunctional power structures (Leana and Van Buren, 1999). That is, this negative consequence may lead to a resistance to change and to a reduced level of innovation (Leana and Van Buren, 1999).
In the above sub-sections supply relationships from a transaction cost economics and social capital theory perspective have been reviewed. The following sections introduce the concepts of contractual and relational governance and their dynamic interplay.

2.2 Contractual Governance: A Conceptualisation

The following sub-section lays the ground for contractual governance through a review and critique of agency theory.

2.2.1 Agency theory

Coase’s (1937) seminal work can be seen as the key impetus for the development of various “theories of the firm”. According to Barney and Ouchi (1986), three related but distinctive main branches of theories of the firm can be identified: (i) transaction cost economics, providing a framework for organisational scope (Williamson, 1975), (ii) agency theory, offering an economic framework that seeks to explain why and how firms behave as they do (Jensen, 1983), and (iii) property rights theory emphasising the interplay between ownership rights, incentives, and economic behaviour (Grossman and Hart, 1986). The research study’s focus is not centred on issues regarding property rights or ownership in inter-organisational relationships, thus the application of property rights theory is not considered. In contrast, the study deploys agency theory as a conceptual lens. This theory studies the contracting problem between self-interested, maximising parties, assuming bounded rationality and opportunistic behaviour by the actors involved. It focuses upon how asymmetric information can explain observed contracting arrangements (Ross, 1973; Holmstroem, 1979; Mirrless, 1999). In addition, contracts are the result of negotiations between principal and agent, who select contracts as a function of the available information (MacLeod, 2002).

The notion of the relationship of agency is central to the theory. Relationship in the theory sense arises “between two (or more) parties when one, designated as the agent, acts for, on behalf of, or representative for the other, designated the principal, in a particular domain of decision problems” (Ross, 1973, p.134). In a buyer–supplier relationship, the purchasing organisation functions as the principal and the
supplier as the agent (Zsidisin and Smith, 2005). Based on the agreement (contract) between principal and agent, the latter makes choices and takes action (Ross, 1973, Macho-Stadler and Pérez-Castrillo, 2001). The theory deals with potential problems of agency relationships and the consequences arising from different forms of contracting and of organising the relationship. It also addresses agency problems that can occur in agency relationships due to differences in goals, attitude towards risk, and information asymmetries among both parties (Eisenhardt, 1989a). If partnering organisations in agency relationships are seen as utility maximizers, then the agent will not always behave in the principal’s best interest and hence agency costs will be incurred.

There are several derivations of the principal-agent model which seek to build a framework for different economical environments and they are characterised by a varying degree of information for both contracting parties (Table 2). The classic principal-agent model involves a risk-averse agent who produces an output which is precisely observable by the risk-neutral principal and the agent, thus giving both parties symmetric information. This model suffers from oversimplification as it assumes perfect knowledge and “information with respect to the variables and functions determining the relationship, and with respect to identities and behaviour” of both parties (Macho-Stadler and Pérez-Castrillo, 2001, p.37). In this vein, the results of empirical studies illustrate that in practise both partnering organisations face imperfect and incomplete information about the other party’s preferences and characteristics (Plambeck and Zenios, 2000). Moreover, information asymmetry arising from behavioural uncertainty due to opportunism hinders the writing of complete, contingent contracts, thereby leading to incomplete contracts which do not incorporate all possible contingencies.

Principal-agent theory addresses information asymmetry and can be applied in all cases wherein one party has an informational advantage over another that can be exploited to the benefit of that party at the expense of the trading partner (Salanié, 1997). Implicit in this statement is the assumption that the information asymmetry is costly to correct and that both parties have not build up inter-organisational trust, which could help to mitigate this information asymmetry. These costs may include ex ante search costs (associated with adverse selection risk) and/or ex post
monitoring and enforcement costs (associated with moral hazard and hold-up risks). Taking this into account, agency theory focuses on the development of contracts that seek to restrict possible opportunistic behaviour, which can lead to inefficiencies in a relationship. Table 2 summarises the three types of agency problems which can arise due to asymmetric information in agency relationships.

<table>
<thead>
<tr>
<th>Types of asymmetric information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk</strong></td>
</tr>
<tr>
<td><strong>Asymmetric Information Problem</strong></td>
</tr>
<tr>
<td><strong>Time</strong></td>
</tr>
<tr>
<td><strong>Principal</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Table 2** Three types of asymmetric information

According to Macho-Stadler and Pérez-Castrillo (2001), the moral hazard model has two distinctive implications. Firstly, when offering a contract it is vital to consider the efforts which the other party will take, if it accepts the contract. Secondly, the optimal contract is determined by the trade-off between efficiency, which means optimal risk allocation between the parties, and the incentives of the agent.

The asymmetric information situation in the moral hazard model leads to incomplete contracts that envisage an element of uncertainty for the signing parties, as information which is jointly observable in the future, is not available at the time when the contract is negotiated (Williamson, 1975; Baiman and Rajan, 2002). Incomplete contracts lead directly to potential inefficiencies in buyer-supplier relationships (Baiman and Rajan, 2002). Apart from information restrictions, that lead to incomplete contracts further restrictions may apply with regard to the form and length of the contracts. Baiman and Rajan (2002) argue that these inefficiencies
arise because each party seeks to extract as much of the trade surplus as possible, whilst still ensuring that the trading takes place. The resulting inefficiency can be mitigated when the contracting parties become more cooperative and trustworthy or their bargaining powers can be manoeuvred in such a way that self-interested behaviour is less disturbing to the relationship (Baiman and Rajan, 2002). An incomplete contract may lead to ambiguity, which creates a breeding ground for shirking responsibility and shifting blame, thus raising the likelihood of conflict, and hindering the ability to: coordinate activities, utilise resources, and implement strategies (Goldberg, 1976). Consequently, incomplete contracts cannot solely be deployed as the basis for relationship governance. For instance, the inability to anticipate, fully, all contingencies that may arise during the relationship prevents the drafting of complete, contingent contracts, and therefore limits their usefulness in information asymmetry reduction.

In addition to the moral hazard model, as can be seen in Table 2, the asymmetric information problem can also occur in the form of adverse selection risk or the hold-up risk. The former occurs when the agent withholds information “on some important characteristics affecting the value of the contract” before the relationship begins, i.e. the signing of the principal’s contract (Macho-Stadler and Pérez-Castrillo, 2001, p.101). Hold-up risk arises when the principal observes that an agent is maximising his own profit instead of realising the former’s objectives. All three asymmetric information problems have further implications for the contract terms and conditions as well as for the incentives the agent receives.

Furthermore, Table 2 summarises the three possible types of opportunistic agent behaviour which is aimed at maximising his own expected profit. In general, all three types are characterised by divergent interests of principal and agent whereby always the agent behaves opportunistically instead of acting in line with the principal’s objectives. An appropriate mixture of penalties and rewards in contractual arrangements can mitigate the opportunistic behaviour, emanating from the three possible risks described. Both incentivisation mechanisms, that is, penalties and rewards, need to be included as vital characteristics of the relationship.

Similar to TCE, agency theory has been criticised for its assumption that human actors behave opportunistically (Perrow, 1986). This criticism is supported by Uzzi
(1997), who states that with the theory’s roots being in neoclassical economics it does not recognise the social structures in which organisations and relationships are embedded. This view can be supported by drawing on Granovetter’s (1985) concept of undersocialisation, whereby the impact of social relations and structure are not given sufficient attention. Additionally, agency theory’s limited perspective on opportunistic agents neglects the potential opportunism by principals in an agency relationship (Perrow, 1986).

The following sub-sections examine contractual governance by defining the concept and reviewing the different labels that are assigned to it in management literature on the subject. In addition, the related concepts of classical and neo-classical contract theory and the positive effects of contractual governance on relationships are introduced.

2.2.2 Contractual governance

The extant literature distinguishes between governance related to the: political, social and legal environment of an economic system, and that related to arrangements “between economic units that govern the ways in which these units can cooperate and/or compete” (Davis and North, 1971, pp.6-7). The latter concept is referred to as the governance structure, relating to the “institutional matrix in which the integrity of a transaction is decided” (Williamson, 1996, p. 378). Three discrete governance structures are distinguished: classical market, hybrid contracting, and hierarchy. By contrast, governance mechanisms refer to the formal and informal rules of exchange between partners (North, 1990; Zenger et al., 2002; Vandaele et al., 2007). Previous studies have distinguished between two types of governance mechanisms regarding inter-organisational relationships: economic strategies, such as contracts and relational governance which is derived from trust and social norms (Griffith and Myers, 2005; Vandaele et al., 2007). Social norms are considered as behavioural guidelines that enforce social obligation in the exchange (Heide, 1994; Cannon et al., 2000).

Contractual governance is considered a formal governance strategy (Ferguson et al., 2005). Following Vandaele et al. (2007), contractual governance refers to “explicit, formal and usually written contracts” (p.240), which are detailed, binding legal
agreements that specify the obligations and roles of both parties in a relationship (Lyons and Mehta, 1997). Previous studies have referred to contractual governance using a myriad of different labels, such as: formal institutions (Zenger et al., 2002), formal contracts (Poppo and Zenger, 2002) and formal control (Williamson, 1975; Das and Teng, 2001). Based on the relevant literature, contractual governance is defined in this study as “the collection of those deliberate inter-organisational mechanisms that are manifested in formal (i.e. contractual, by law enforceable) documents”. Such phenomena can be explicitly observed in the form of written documents and include, for instance, service level and concession agreements (Zenger et al., 2002).

Transaction cost economics (TCE) is an economic concept for explaining inter-organisational exchanges that are typified by specific investments leading to dependence and vulnerability. Moreover, the TCE framework prescribes that companies align their governance features of exchange relationships to match known exchange hazards (Williamson, 1985). Further, according to this perspective, relational governance (with trust as its key component) is unreliable as a safeguard and therefore some form of formal control is needed to reduce the hazards of opportunism in relationships. In addition, contractual safeguards are established to minimise cost and performance losses from relationship hazards (Joskow, 1988). In consequence, safeguards in TCE literature are primarily based on contract enforcement and monitoring, so called ‘formal control’. Moreover, the outcome of the crafting process is mostly a “complex contract that defines remedies for foreseeable contingencies or specify processes for resolving unforeseeable outcomes” (Poppo and Zenger, 2002, p.707). According to TCE theorists, contracts specify what is acceptable and what is not in a relationship by providing threats of legal enforcement or non-legal retribution. That is, TCE relies to a large extent on economic and legal sanctions for the purpose of enforcing contractual obligations. The most efficient form of governance, according to this perspective, is a trade-off between different instruments of formal control, depending on the degree of asset specificity, uncertainty and transaction frequency (Williamson, 1985).

Closely related to TCE and agency theory is the classical contract theory, which is aiming at achieving the optimal contract, i.e. the contract with the lowest transaction
costs relative to outcome efficiency. Further, proponents of this theory assume complete, written contracts which are legally binding (Lyons and Mehta, 1997). Such complete contracts reduce uncertainty and the risk of opportunism (Williamson, 1985) and provide a safeguard against ex post performance problems (Luo, 2002). For instance, Parkhe (1993) points out that the contracts may stipulate penalties that change the pay-off structure by increasing the cost for opportunistic behaviour. In addition, they can reduce transaction ambiguity by clear contractual specification of what is and what is not allowed within a relationship (Lui and Ngo, 2004). In this context, contracting organisations structure complex contracts and protect the relationship against opportunism by relying upon legal rules, standards and remedies implied in the law (Achrol and Gundlach, 1999). However, excessively detailed contracts face the problem of being inflexible and complicated to monitor (Luo, 2002).

In contrast to classical and neoclassical contract theory, Macneil (1980) draws attention to relational contracting, which includes social elements, such as norms and expectations, in order to facilitate the exchange between two parties “to the process of projecting exchange into the future” (p.4). Baker et al. (2002) argue that relational contracts help to circumvent the difficulties involved in complete contracts. That is, in contrast to a complete contract, which must be “specified ex ante in terms that can be verified ex post by the third party, [whereas] a relational contract can be based on outcomes that are observed by only the contracting parties ex post, and also on outcomes that are prohibitively costly to specify ex ante” (Baker et al., 2002, p.40). Common contract norms for relational exchange are: role integrity, solidarity, planning, flexibility and mutuality (Macneil, 1980).

Control through formal contracts depends on three underlining conditions: codification, monitoring and safeguards, which are seldom fulfilled in an inter-organisational relationship (Bijlsma-Frankema and Costa, 2005). First, formal contracts are reliant on the programmability of tasks and behaviours and the measurability of outcomes ex ante (Das and Teng, 2001). Thus, the transaction process and outcome between two parties need to be predictable and codifiable (Bijlsma-Frankema and Costa, 2005). Second, formal contracts require monitoring to determine actors’ behaviour with regards to the rules set out in the contract. Third,
for effective control there needs to be institutional structure in place to enforce the contract.

In practice, it might not always be possible to draft complete contracts owing to there being asymmetric information, as explained by agency theory, or desirable, as this often would involve a timely and therefore costly process. Bijlsma-Frankema and Costa (2005) argue that organisations that are aiming to specify everything ex ante will face high transaction costs and may delay the project execution. Moreover, human actors’ bounded rationality, as emphasised in the TCE and agency theories, leads to incomplete contracts (Hart, 1988). In practice, companies often deploy incomplete contracts which have an in built element of uncertainty that makes them unenforceable in their entirety.

However, incomplete contracts contain non-legally enforceable and/or poorly specified intentions, promises, and conditions which may easily be misinterpreted by the courts (Deakin and Wilkinson, 1998, Kim and Mahoney, 2005). Consequently, an incomplete contract is defined “as an agreement that goes beyond what is verifiable” (Chen, 2000, p.211). Gaps in an incomplete contract are filled as contingencies arise, meaning that the contracts offer less certainty, fewer legal safeguards protecting the parties, but greater flexibility in the execution of the agreement (Klein Woolthuis et al., 2005). In contrast, Goldberg (1976) argues that an incomplete contract may lead to ambiguity in relationships, thereby increasing the likelihood of conflict and hindering the ability to coordinate activities and resources. However, in situations where some elements of enforcement are unverifiable, incomplete contracts may be optimal (Bernheim and Whinston, 1998). Moreover, non-legally enforceable elements of the contract can still yield elements of formal control, by indicating limits of acceptability.

The extant literature draws out various positive effects of deploying contractual governance in inter-organisational relationships. For instance, contracts can function as a tool for enabling organisations to reduce internal complexity in their interaction system (Lane and Bachmann, 1996). Moreover, the longevity in inter-organisational relationships is supported by long-term contracts which are seen as a means of cementing business relationships (Arrighetti et al., 1997), as they represent promises or obligations to perform certain actions in the future (Macneil, 1978) and thus
promote the emergence of mutual trust (Parkhe, 1993). This view is supported by Deakin et al.’s (1997) study which depicts the use of contracts as a planning and incentivisation tool in long-term business relationships. Moreover, detailed contracts are viewed as risk allocation mechanisms in long-term relationships. From another perspective, it is argued that contracting parties draw up contracts with the intention to safeguard the relationship against outside contingencies and not to safeguard against opportunism (Klein Woolthuis et al., 2005).

The importance of establishing contracts in relationships is also related to their termination and conflict resolution issues. Relationship dissolution has been found to be particularly challenging when there is no written contract in place and when the relationship is of an exclusive, long-term nature, involving substantial investments by suppliers (Harrison, 2004). Moreover, the findings of previous studies illustrate that the wider legal system plays a vital role in building trust among contracting parties (Deakin et al., 1997). Along the same lines, Luhmann (1979) claims that the predominant social function of law is based on its potential to absorb risk and uncertainty and its ability to foster cooperation rather than dispute and conflict.

In summary, a contract provides a legally bound, institutional framework in which each party’s: rights, duties, and responsibilities are codified and the goals, policies and strategies underlying the relationship are specified (Luo, 2002). Consequently, the purpose of a contract is to facilitate the exchange and prevent opportunistic behaviour. However, given the nature of incomplete contracts, which cannot be completely enforced by law, opportunities for opportunistic behaviour may arise in inter-organisational relationships. Therefore, relational governance may offer a complementary governance mechanism for managing inter-organisational relationships. Hence, the following section conceptualises trust and reviews relational governance in inter-organisational relationships.
2.3 Relational Governance: A Conceptualisation

The following sub-section reviews the underlying concept of trust to lay the ground for the subsequent discussion on relational governance.

2.3.1 Conceptualisation of trust

The concept of trust is closely related to social capital theory. In this context, Tsai and Ghoshal (1998) have found that the cognitive and structural dimensions of social capital impact on trust, which represents an important aspect of the relational dimension of social capital. Ring and Van de Ven (1992) suggest that trust is a key element in inter-firm governance and where it exists it leads to reduced risk of opportunistic behaviour in inter-organisational relationships. Considering the longevity of inter-organisational relationships, Arrow (1972) states that “virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time” (p.357). Hence, trust has been identified as a central construct in buyer-supplier relationship management (Sako, 1992). However, the literature on inter-organisational relationships often remains unclear as to what trust actually is, thus making empirical findings regarding the concept difficult to interpret. Before introducing the concept of relational governance, it should be clear what is meant by the notion of trust and on which levels it might function as a form of governance. The following paragraphs examine different trust definitions, typologies, two distinct trust dimensions, the origins of trust and its consequences.

Although there are many trust definitions (see Table 3), the concept is typically presented with two core elements: positive expectations regarding the intentions or actions of others and voluntary vulnerability towards another actor (Rousseau et al., 1998). In other words, the notion encompasses the belief in the partnering organisation’s ability to fulfil a task in combination with the belief in their goodwill and positive intention (Mayer et al., 1995). Zaheer et al. (1998, p.143) defines trust as “the expectation that an actor (1) can be relied on to fulfil obligations (Anderson and Weitz, 1989), (2) will behave in a predictable manner, and (3) will act and negotiate fairly when the possibility for opportunism is present (Anderson and Narus, 1990)".
<table>
<thead>
<tr>
<th>Source</th>
<th>Empirical / theoretical study</th>
<th>Conceptualisation of Trust (inter-personal and inter-organisational)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deutsch (1958)</td>
<td>Empirical - experiment</td>
<td>An individual may be said to have trust in the occurrence of an event if he expects its occurrence and his expectation leads to behaviour which he perceives to have greater negative motivational consequences, if the expectation is not confirmed than positive motivational consequences, if it is confirmed.</td>
</tr>
<tr>
<td>Zand (1972)</td>
<td>Empirical - experiment</td>
<td>Actions that increase one’s vulnerability to another whose behaviour is not under one’s control in a situation in which the penalty one suffers, if the other abuses that vulnerability, is greater than the benefit one gains if the other does not abuse that vulnerability.</td>
</tr>
<tr>
<td>Granovetter (1985)</td>
<td>Theoretical</td>
<td>Confidence in the general morality of individuals.</td>
</tr>
<tr>
<td>Bradach and Eccles (1989)</td>
<td>Theoretical</td>
<td>The positive expectation that reduces the risk that the exchange partner will act opportunistically.</td>
</tr>
<tr>
<td>Anderson and Narus (1990)</td>
<td>Empirical - survey</td>
<td>A firm’s belief that partners will perform actions that will result in positive outcomes for the firm and will not take unexpected actions that would result in negative outcomes for the firm.</td>
</tr>
<tr>
<td>Sitkin and Roth (1993)</td>
<td>Theoretical</td>
<td>The belief, attitude or expectation that the actions or outcomes of another individual or organisation will be acceptable or will serve the partner’s interest.</td>
</tr>
<tr>
<td>Gulati (1995)</td>
<td>Empirical - secondary data sources</td>
<td>The particular level of subjective probability with which agents assess whether another agent or group will perform a particular action both before they can monitor such action and in a context in which it affects their own action.</td>
</tr>
<tr>
<td>Kumar et al. (1995)</td>
<td>Empirical - survey</td>
<td>The belief that the partner is honest and benevolent.</td>
</tr>
<tr>
<td>Uzzi (1997)</td>
<td>Empirical - case study</td>
<td>The belief that an exchange partner would not act in self-interest at another’s expense and operates not with calculated risk but uses a heuristic approach, having a predilection to assume the best when interpreting another’s motives and actions.</td>
</tr>
<tr>
<td>Sako and Helper (1998)</td>
<td>Empirical - survey</td>
<td>Expectation held by an agent that its trading partner will behave in a mutually expectable manner (including an expectation that neither party will exploit the other’s vulnerabilities).</td>
</tr>
<tr>
<td>Rousseau et al. (1998)</td>
<td>Theoretical</td>
<td>A psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or the behaviour of another.</td>
</tr>
<tr>
<td>Zaheer et al. (1998)</td>
<td>Empirical - interviews and survey</td>
<td>The leap of faith by placing confidence in a referent without knowing with absolute certainty that the referent’s future actions will not produce unpleasant surprises.</td>
</tr>
<tr>
<td>Currall and Inkpen (2002)</td>
<td>Theoretical</td>
<td>Trust is the decision to rely on a partner with the expectation that the partner will act according to a common agreement.</td>
</tr>
<tr>
<td>De Wever et al. (2005)</td>
<td>Theoretical</td>
<td>The willingness of a party to be vulnerable to the actions of another party, based on the expectation that the other will perform a particular action important to the truster, irrespective of their being the ability to monitor or control that other party.</td>
</tr>
</tbody>
</table>

**Table 3** Representative literature on trust conceptualisation

*(adapted from Geyskens et al., 1998, p.226)*
Taking into account all the features and various notions of trust, two ‘trust dimensions’ are prevalent in the literature on inter-organisational relationships, namely: the inter-personal and the inter-organisational level (Zucker, 1986; Shapiro, 1987). A fundamental advantage of conceptualising trust in these two dimensions is that by taking this perspective the inherently individual level of the phenomenon can be extended to the organisational level of analysis.

Inter-personal trust is referred to as “the extent of a boundary-spanning agent’s trust in her counterpart in the partner organisation” (Zaheer et al., 1998, p.142). Moreover, in an exchange relationship, the role of boundary-spanning individuals, as they build up strong inter-personal ties, has an important influence on inter-firm exchanges (Zaheer et al., 1998). Boundary-spanning individuals belonging to an organisation are characterised by having a higher involvement and interaction in the inter-organisational relationship than their counterparts (Friedman and Podolny, 1992). Trust is built among such individuals from the contracting organisations and is based upon close interaction and personal ties (Macaulay, 1963; Kale et al., 2000). Strong inter-personal ties, as formed by boundary-spanning relationships, are seen by some authors as channels through which partners learn (Gulati and Gargiulo, 1999). However, others argue that if cooperation is founded on trust based solely on personal bonding, problems may arise concerning the exigencies of organisational roles (Nooteboom, 1996). For instance, personal loyalty may deviate from organisational interest and consequently lead to corruption or embezzlement (Nooteboom, 1996). Conversely, personnel change may lead to a breakdown of relations that are solely based on personal trust.

Trust may also exist between organisations at the inter-organisational level which has been defined as “the extent of trust placed in the partner organisation by the members of a focal organisation” (Zaheer et al., 1998, p.142). This form of trust reflects an organisation’s expectations that the partner organisation will not act opportunistically (Bradach and Eccles, 1989). One premise of inter-organisational trust exists where there is predictability of the partnering organisation’s behaviour towards a vulnerable focal organisation and this helps to develop greater confidence in the relationship (Gulati and Nickerson, 2008). Studies on the base of inter-organisational trust are diverse, but in general argue that it can be treated as goodwill-based (Saparito et al.,
2004) or competence-based (Lui and Ngo, 2004). Trust in inter-organisational relationships can develop through institutionalised processes or routines that enable the partners involved to interact fairly and reliably (Zucker, 1986) through social relationships (Granovetter, 1985; Gulati, 1995).

Inter-organisational trust is seen as relational in nature (Zaheer and Venkatraman, 1995). According to Zaheer and Harris (2006), the term relational has two implications when applied to trust. First, there is relational-as-social trust, in contrast to calculative, which implies that there is the inclusion of relational elements, or a social orientation. Second, relational-as-dyadic trust considers trust in relation to an identified other, thus favouring a reciprocal rather than dispositional view of the concept. Further, a relational perspective on inter-organisational trust implies that a “specific organisation is the object of trust” (Zaheer and Harris, 2006, p.181).

There is a higher level of risk when inter-personal trust is lacking and this can lead to the partnering organisations gathering information on each other as a form of insurance (Zaheer and Harris, 2006). These authors also argue that information search and collection costs “are more easily amortized over the higher volume and value of transactions between organisations” than between individuals (Zaheer and Harris, 2006, p.184). The extant literature shows that inter-organisational trust leads to, for instance: increased strategic flexibility (Young-Ybarra and Wiersema, 1999), improved knowledge transfer (Szulanski et al., 2004) and positive perceptions of exchange success (Mohr and Spekman, 1994). However, there has been limited research exploring the levels of time and resources that need to be invested in building up inter-organisational trust.

Zaheer et al. (1998) argue that inter-personal trust, by itself, is insufficient for managing a relationship and thus a combination of both inter-personal and inter-organisational trust is needed. For instance, informal commitments initiated and practised by boundary-spanning individuals could be translated to the organisational level, thereby improving firms’ structures and routines (Zucker, 1977). In turn, routines are seen as positively influencing inter-organisational workings and behaviours as they constitute the “very means by which trust and trustworthiness are manifested” (Zaheer and Harris, 2006, p.189). Consequently, when examining the
characteristic of an inter-organisational relationship, both trust dimensions, interpersonal and inter-organisational, should play an essential role within the analysis.

The relevant literature offers a number of different typologies regarding the origins of trust. For instance, Zucker’s (1986) typology distinguishes between: characteristic-based, institutional-based and process-based trust. Characteristic-based trust relies on personal characteristics, thus exchanges are limited to those with a common cultivated system, shared background and expectations. Process-based trust derives from experiences of social and/or economic exchange. This view is consistent with Granovetter’s (1985) study suggesting that social interactions are embedded in economic actions. Institutional-based trust transcends exchange experiences and does not depend upon the exchange partner. This form of trust relies on institutional arrangements that lead to trustworthy behaviours, including: traditions, professions, certifications and licences.

Sako’s (1992) study distinguishes also three different notions of trust: contractual, competence and goodwill. Whereas contractual trust refers to the fulfilment of basic contractual commitments, competence trust refers to one party’s perceived level of competence by another according to the latter’s expectations regarding standards of professional skill and expertise. Sako’s goodwill trust encompasses not only agreements or professional standards, but relies “on a sharing of values and on experience drawn from particular trading relationships” (Deakin et al., 1997, p.109). The presence of this form may mitigate relational risks by increasing confidence in the partner’s willingness to fulfil their responsibilities (Das and Teng, 1998). In other words, it is argued that increasing confidence in partner’s goodwill leads to: cooperation, increased information exchange and deeper commitment between the parties involved (Fryxell et al., 2002).

The effects of trust on performance have been identified as: reduced transaction costs, greater openness and flexibility, closer collaboration and coordination, inter-organisational learning, improved conflict management and enhanced capacity for innovation (Sako, 1992; Ganesan, 1994; Powell, 1996; Lane, 1998). In addition, previous studies have found that information sharing increases with the growing perception of a partner’s trustworthiness (Dyer and Chu, 2003). Another direct effect that reliance on trust has been discovered as having is an increase in learning and
knowledge sharing between collaborating organisations (Dirks and Ferrin, 2001). Consequently, long-term relationships and trust are seen as encouraging: effective communication, information sharing and joint pay-offs (Ring and Van de Ven, 1992; Dwyer et al., 1987) and may create strong social bonds between the actors involved (Barney and Hansen, 1994) and hence, much of the relevant literature supports the view that parties who trust each other are more willing to engage in cooperative activity through which further trust may be generated (Putnam, 1993).

Proponents of transaction cost economics assume that calculation, not trust, determines cooperative behaviour (Williamson, 1996). Moreover, Williamson (1996) argues that institutions that develop trust can only be understood in calculative terms and therefore the concept should be reserved for the personal, altruistic version alone. In a similar vein, in contrast to the positive effects of trust, Kern’s (1998) study of low- and high-trust in the German Economy discovered that overly high degrees of trust can lead to stagnation due to ‘lock-in situations’ between firms, and subsequently to risk-avoidance and the drying up of innovation. Moreover, Poppo et al. (2008) point out that trust not only binds, but also blinds parties. This view is supported by Uzzi (1997), arguing that long-standing, relationally embedded relationships may suffer from sub-optimal information search. That is, organisations will become “locked-into” those relationships and thereby neglect to obtain other relevant information from the market. Such information may, for instance, prove vital for spotting shifting market trends or emerging innovative technology.

The following sub-section examines relational governance by defining the concept and reviewing the labels that are conferred on it in the appropriate management literature for describing it. In addition, the functions of relational governance and its limitations are discussed.

2.3.2 Relational governance

Relational governance has been defined as the strength of the social norms present in an exchange situation (Ferguson et al., 2005). Moreover, it is considered informal and social in comparison to more formal contractual governance such as contracts (Vandaele et al., 2007). That is, this form of governance emerges from the values and agreed-upon processes in the exchange relationship (Macneil, 1980) and
incorporates: trust and commitment (Lui and Ngo, 2004), relational capital (Kale et al., 2002), information sharing routines (Poppo et al., 2008), and informal exchange (Cook and Emerson, 1978). Previous studies have referred to relational governance by assigning to it a number of different labels, such as: informal self-enforcing governance (Dyer and Singh, 1998), non-economic, sociological factors (Zaheer and Venkatraman, 1995), and informal institutions (Macneil, 1978; Zenger et al., 2002). Based on the extant literature, relational governance is defined in this study as “the collection of those more emergent inter-organisational mechanisms that are manifested in socially derived ‘arrangements’, such as norms, custom and practice”.

In contrast to contractual governance, such phenomena are not, for the most part, accessible through written documents (Zenger et al., 2002).

In sum, the perspective of organisational scope underpinned by the TCE perspective applies an impersonal, discrete and transaction-based approach. In contrast, the relational approach emphasises the role of developing trust in inter-organisational relationships thereby achieving a mutually successful outcome. The IMP network model as another perspective (Håkansson and Snehota, 1995), suggests that organisations are inter-dependent and relationships develop when two companies build up: activity links, resource ties, and actor bonds. Furthermore, inter-organisational relationships which are based on relational governance are governed by social processes that promote norms of: flexibility, solidarity and information exchange (Poppo and Zenger, 2002). These social processes safeguard against exchange hazards and facilitate the enforcement of obligations.

Any unforeseeable contingencies are safeguarded by: flexibility, which allows for a bilateral approach to problem solving, solidarity and information sharing and this in term helps to consolidate the long-term relationship. Moreover, partnering organisations’ expectations of relationship continuity and longevity that accompany relational governance generate incentives to make exchange-specific investments (Poppo and Zenger, 2002). In this context, social obligations enforce compliance with relational norms and practices (Macaulay, 1963; Uzzi, 1997). This perspective is supported by research findings showing that a variety of enforcement mechanisms, such as: expectations of repeat businesses, reputation effects, social obligations, and
fulfilment of basic social needs support the use of relational governance (Zhou and Poppo, 2006).

Trust, as a key component of social capital theory, is considered to be an important element of relational governance, resulting in decreased relational risk (Macaulay, 1963; Granovetter, 1973; Nooteboom, 1996; Dyer and Oh, 1988; Bradach and Eccles, 1989; Ring and Van de Ven, 1994). It can be based on the social norms of: reciprocity, flexibility, solidarity, personal bonding or routinised behaviour (Klein Woolthuis et al., 2005). When developing a norm of solidarity this indicates that the organisations concerned maintain a long-term, cooperative relationship and do not act to gain short-term benefits (Olsen et al., 2005). Thus, Olsen et al. (2005) describe the norms of reciprocity and flexibility as the promotion of the fair distribution of rewards between organisations, and the motivation to adjust plans and strategy to changing circumstances, respectively. Trust is considered as being a self-enforcing safeguard which can act as an effective and less costly substitute for contracts (Uzzi, 1997).

In contrast, formal contracts might undermine the development of relational governance, by signalling distrust and encouraging opportunistic behaviour (Macaulay, 1963; Ghoshal and Moran, 1996). Applying contracts as a form of power may be effective in some cases, but more often yields disadvantages, such as evoking conflict (Gaski, 1984) and defensive behaviour (Hirschman, 1984). Distrust, it is argued, evokes opportunistic behaviour and may lead to a lack of loyalty, hence increasing the need for formal control (Ghoshal and Moran, 1996). In addition to the previously mentioned negative influences, Nooteboom (1999) argues that the TCE perspective, by supporting the deployment of contractual safeguards, imposes a straightjacket especially constraining those relationships with a focus on innovation. Moreover, in sharp contrast to contracts, trust is seen as having positive side-effects on inter-organisational relationships, as partners who trust each other are more receptive to each other's ideas, accept more interdependence and hence have less need to impose control on others (Zand, 1972).

One potential problem of using relational governance to sanction behaviour is that as the scale and scope of exchange increases, relationships become harder to maintain and sanction through long-standing ties, because repeated business and cultural
homogeneity are less likely to occur (North, 1990). Additionally, the development and maintenance of relational governance, including a network of social ties, may be time- and resource-consuming (Larson, 1992). Furthermore, dense social ties, as proposed by social capital theory, may restrict companies from acquiring information and spotting new opportunities outside their network (Uzzi, 1997). In the following section the dynamics of contractual and relational governance in inter-organisational relationships are discussed.

2.4 Dynamics of Contractual and Relational Governance

The extant literature suggests that a vast number of governance challenges exist in inter-organisational relationships and thus reliance on a single governance mechanism is not sufficient (Olsen et al., 2005). Moreover, recent studies have criticised the limited perspective of previous studies, which viewed contractual and relational governance as separate governance mechanisms (Poppo and Zenger, 2002; Lewis and Roehrich, 2009; Klein Woolthuis et al., 2005; Zheng et al., 2008). The following sub-sections discuss both governance mechanisms as individual and complementary mechanisms.

2.4.1 Contractual and relational governance as individual mechanisms

The view on contractual and relational governance as individual mechanisms is broadly sub-divided into two different perspectives. That is, some scholars posit that the presence of one governance mechanism precludes the need for the other, whereas others argue that the existence of one governance mechanisms may undermine and damage the formation of the other.

Preclusion

Some authors have assigned limited ability to contractual governance in supporting relationships and thus in their opinion social networks embodying informal governance mechanisms, such as trust, play a vital role (Granovetter, 1985). Authors belonging to this school of thought argue that relational governance based on trust and social norms facilitates cooperative relationships without the costs and complexity associated with formal agreements (Macneil, 1978; Gulati, 1995; Adler, 2001; Ring and Van de Ven, 1994). In addition, such proponents claim that trust
results in more open and frequent information sharing, hence facilitating coordination and rendering formal contracts for information sharing obsolete (Ring and Van de Ven, 1992). Dore (1983) argues that relational governance facilitates cooperation in relationships through norms and obligations that economise the use of contractual governance mechanisms. Therefore, higher levels of trust lead to lower levels of costs in inter-organisational relationships (Cummings and Bromiley, 1996). In fact, Dyer and Singh (1998) argue that informal self-enforcing agreements which rely on trust and reputation can ‘often supplant’ formal contracts. Along the same lines, where trust exists it can provide incentives for: cooperation, reducing uncertainty and increases information exchange (Gambetta, 1988; Gulati, 1995; Gulati and Singh, 1998). In other words, the presence of trust economises the implementation of control as the more trust one has, the less control one needs over a partner (Nootenboom, 1999).

Both governance mechanisms are also deployed to increase predictability about the future behaviour of partnering organisations (Nootenboom, 2002), thus they are considered alternative ways for arriving at a stable order in relationships (Gulati, 1995). However, complex contracts can crowd out trust in that there are fewer opportunities for relational arrangements whereby trust can be established in an exchange relationship (Puranam and Vanneste, 2009). Further studies have investigated the financial advantage of using relational governance mechanisms to manage long-term inter-organisational relationships. For instance, Dyer (1997) cites that while the initial costs of developing trust are high, over a longer period trust will be more effective than contracts, because the latter require revision for most transactions to safeguard the partnership. In contrast, transaction cost economists argue that if trust goes beyond calculative self-interest it inevitably leads to blind trust, which will not survive in competitive environments (Williamson, 1993).

**Destruction**

An even stronger substitution perspective has been adopted by Macaulay (1963), who argues that contractual governance is not only unnecessary, but also damages the formation and operation of relational governance. He claims that “not only are contract and contract law not needed in many situations, their use may have, or may be thought to have, undesirable consequences” (Macaulay, 1963, p.64). Along the
same lines, Sitkin and Roth (1993) claim that “legalistic remedies can erode the inter-personal foundations of a relationship they are intended to bolster because they replace reliance on an individual’s “goodwill” with objective, formal requirements” (p.376). This perspective interprets the use of contracts by a party as signalling distrust, thus parties deploying such contracts are neither trusted nor considered trustworthy for behaving appropriately without contracts (Bradach and Eccles, 1989; Ghoshal and Moran, 1996; Malhotra and Murnighan, 2002). Moreover, using contracts as a form of power may yield disadvantages, such as evoking conflict (Gaski, 1984) and defensive behaviour (Hirschman, 1984).

2.4.2 **Links between contractual and relational governance**

Although both governance mechanisms have been positioned as substitution arrangements, both perspectives have significant limitations if considered in isolation. That is, contractual and relational governance have been found by a number of scholars to be interrelated (Larson, 1992; Zaheer and Venkatraman, 1995; Poppo and Zenger, 2002; Halldórsson and Skjøtt-Larsen, 2006; Klein Woolthuis et al., 2005; Zheng et al., 2008). In this vein, previous empirical studies have investigated the relationships between both governance mechanisms: in technologically intensive entrepreneurial partnerships (Larson, 1992), in geographically constrained industries (Uzzi, 1997), when outsourcing information technology (Poppo and Zenger, 2002) and in emerging economies (Zhou and Poppo, 2006; Liu et al., 2009).

Earlier studies have shown that legal regulation of inter-organisational relationships is an important precondition for trust (Luhmann, 1979; Zucker, 1986). Moreover, well-specified contracts may promote cooperative, long-term, trusting exchange relationships, as such contracts “narrow the domain and severity of risk to which an exchange is exposed and thereby encourage cooperation and trust” (Poppo and Zenger, 2002, p.708). In addition, these authors argue that the continuity and cooperation encouraged by relational governance may lead to contractual refinements that further support greater inter-organisational cooperation. This complementary governance interplay may also function in reverse, in that contracts can provide customised approaches and mutually agreed policies and procedures for dealing with necessary adaptations in developing long-term, trusting relationships.
In a similar vein, clearly articulated: contractual terms, remedies and processes for dispute resolution in combination with relational norms of: solidarity, bilateralism, and continuance may instill confidence in inter-organisational relationship cooperation (Baker et al., 1994). For instance, specifications of monitoring procedures and reporting duties may help to record the partners’ behaviour and increase transparency in an exchange relationship (Mellewigt et al., 2007).

The complementary argument is also supported by North (1990), who states that “formal rules can complement and increase the effectiveness of informal constraints” (p.46). For example, formal control mechanisms may increase trust by providing actors in relationships with objective rules and measures for assessing each other (Sitkin, 1995). Additionally, the author argues that contracts can simultaneously manage risk and uncertainty, whilst furthering the development of trust. Deploying contracts to promote cooperation might provide the foundation for future interaction and cooperation which in turn facilitates trust development (Malhotra and Murnighan, 2002). This finding is supported by Gulati et al. (2005), who contend that trust resolves uncertainty about partners’ motives, complex contracts offer the necessary protection from coordination failures. The results of Bachmann’s (2001) study show that detailed and lengthy contracts are not necessarily interpreted as signalling distrust, but can function as a reaffirmation of expectations. Incomplete contracts are seen as offering more protection in the presence of trust, because they can fill the gaps that exist in the contract (Arrow, 1974). This view is supported by Lazzarini et al. (2004), stating that incomplete contracts may facilitate the self-enforcement of informal agreements such as relational governance. Handfield and Bechtel (2002) argue that the development of trust may not be based on “the existence of contracts, as on the tangible commitment of assets or a record of satisfactory performance that emerges over time” (p.376).

Previous studies have drawn attention to the social aspects accompanying transactions and contracts (Macneil, 1980; Chen, 2000). Moreover, the classical and neo-classical economics perspective on contracts has been criticised for not appropriately taking into consideration the social context of relationships (Macneil, 1980). Contracts alone are not sufficient enough to maintain continuity in
relationships due to their incompleteness (Luo, 2002). These authors adopt the view that relationships take place within a social environment and are also shaped by social control arising from norms of trust and reciprocity. Deploying contractual safeguards that promote expectations of cooperative behaviour result in a mitigation of relational governance limits (Poppo and Zenger, 2002). Additionally, contracts minimise risks whilst at the same time maximising longevity by increasing the penalties faced by business partners who terminate a contract prematurely (Poppo and Zenger, 2002). Hence, parties who contractually fail to specify exchange elements merely increase incentives for short-run cheating and thus lower expectations of cooperation (Baker et al., 1994).

Moreover, formal contracts are seen to support earlier, more vulnerable stages in a relationship and long-term contracts are explicitly drafted with provisions to promote the longevity of exchanges (Poppo and Zenger, 2002). Therefore, contracts should not merely incorporate deliverable outcomes, but also provide frameworks for bilateral adjustments to facilitate cooperative relationships. In addition, the process of drafting complex contracts requires parties to determine and commit mutually to processes that deal with unforeseeable contingencies, penalties for non-compliance and joint expectations of the relationships (Poppo and Zenger, 2002). Cannon et al. (2000) state that not mutually working out the commitment of resources or the division of functions and responsibilities in a relationship can “leave parties with implicit assumptions and divergent expectations” (p.184). Conversely, higher degrees of trust enable higher levels of formal coordination and control through contracts (Dekker, 2004).

Trusting relationships support open communication and negotiations on contract details (Klein Woolthuis et al., 2005). In addition, information sharing initiated by trusting relationships (Dyer and Singh, 1998), “enables organisations to record aspects of their relationships in formal contracts” (Vlaar et al., 2007, p.414). This view is supported by Weick (2001), who states that independent of the degree of trust, certain coordination and control mechanisms are necessary to support inter-organisational relationships with a degree of certainty and stability. Moreover, formal contracting reduces biases and forces articulation, thus serving as a means to make better sense of an inter-organisational relationship (Vlaar et al., 2007). In a
similar vein, Lui (2009) argues that well specified, legally binding clauses may facilitate knowledge assimilation during the early relationship phases.

However, some dimensions of the exchange may prove impossible to specify contractually as companies have limited ability in foreseeing future eventualities. Whilst well-specified contracts will bring about cooperative, long-term, trusting business relationships, an excessively detailed contract will prove inflexible and hence compliance with monitoring tasks in relationships impossible to execute (Poppo and Zenger, 2002). Consequently, governance that solely relies on contracts may not be efficient because it lacks enforcement capabilities. Relational governance becomes an appropriate complement to the limits of contracts, by facilitating continuance when changes and conflicts arise in a relationship (Macneil, 1978). That is, it is seen as promoting flexibility in changing environments and value creation activities which are outside of the contractually stipulated terms (Liu et al., 2009).

Cannon et al. (2000) argue that “contracts serve the important functions of structuring expectations and obligations and, in the event required, as an enforcement mechanism”, while relational governance provides a function to counteract opportunism in uncertain environments (p.185). Therefore, the joint use of contractual and relational governance mechanisms provides more efficient outcomes than the use of either in isolation (North, 1990; Poppo and Zenger, 2002; Klein Woolthuis et al., 2005).

Scholars from the different study perspectives recognise the importance of repeated exchanges in inter-organisational relationships. Economists emphasise the calculative nature of relational governance in the present when expectations of future exchanges prompt current cooperation. That is, in contrast to sociologists, they consider the “trustworthy status” as conditional upon the benefits derived from the trustworthy status (e.g. repeated business) over the status of self-interest (Klein, 1996). Moreover, Baker et al. (2002) argue that expectations of benefits from future cooperative behaviour within an inter-organisational relationship encourage cooperation in the present. This logic is common to game theory, where opportunistic behaviour in the present is contrasted with the benefits of cooperative behaviour in the future. On the other hand, the sociological perspective emphasises
the importance of prior exchanges in forming social norms and ties that emerge in subsequent exchanges (Uzzi, 1997).

Taking into consideration the fact that inter-organisational relationships usually consist of a large number of interfaces between the buyer and supplier organisations, they are not accurately represented as a single entity, but should rather be seen as a process (Cousins, 2002). However, the TCE framework does not explicitly consider the dynamic evolution of governance mechanisms and transactions over time (Ring and Van de Ven, 1992). In relation to the structuring of cooperative inter-organisational relationships, these authors point out that contracts and levels of trust are dynamic. Thus, parties in long-term inter-organisational relationships will periodically alter governance structures and accompanying safeguards when deemed necessary and consequently the processual understanding how governance mechanisms evolve over time is crucial (Ring and Van de Ven, 1992). Moreover, the notion of time is also of paramount importance when managing buyer-supplier relationships (Ellegaard et al., 2003). Furthermore, the interplay of contractual and relational governance mechanisms is by no means static throughout the course of a relationship (Halldórsson and Skjøtt-Larsen, 2006). Finally, in this context, drawing on the extensive literature regarding inter-organisational governance, it can be argued that the relationship between contractual and relational governance is too complex for it to be accommodated into a static model and rather should be treated as having a dynamic nature.
<table>
<thead>
<tr>
<th>Source</th>
<th>Empirical / theoretical study</th>
<th>Relationship of contractual and relational governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larson (1992)</td>
<td>Empirical - ethnography</td>
<td>Trust as a precondition for contracts. Trust can diminish the extent of formal contracts, many terms of which can be replaced by oral or informal agreements.</td>
</tr>
<tr>
<td>Achrol and Gundlach (1999)</td>
<td>Empirical - simulation / survey</td>
<td>Contracts and social norms both found to be effective in enhancing supplier performance individually and in combination.</td>
</tr>
<tr>
<td>Cannon et al. (2000)</td>
<td>Empirical - survey</td>
<td>Increasing the relational content of a governance structure containing contractual agreements enhances performance when transactional uncertainty is high, but not when it is low.</td>
</tr>
<tr>
<td>Das and Teng (2001)</td>
<td>Theoretical</td>
<td>Trust and control (contractual governance) can and should be combined in specific ways for best risk management results.</td>
</tr>
<tr>
<td>Bennett and Robson (2004)</td>
<td>Empirical - survey</td>
<td>Combination of trust with contracts is most associated with higher levels of client impact and satisfaction.</td>
</tr>
<tr>
<td>Lazzarini et al. (2004)</td>
<td>Empirical - experiment</td>
<td>Combination of both governance mechanisms is better than relying on each individually.</td>
</tr>
<tr>
<td>Lui and Ngo (2004)</td>
<td>Empirical - survey</td>
<td>Contractual safeguards and trust are important control mechanisms in non-equity alliances and lead to cooperative outcomes.</td>
</tr>
<tr>
<td>Klein Woolthuis et al. (2005)</td>
<td>Empirical - case study</td>
<td>Trust and contracts are both complements and substitutes depending on the intentions with which the contracts are drawn up and used.</td>
</tr>
<tr>
<td>Olsen et al. (2005)</td>
<td>Empirical - case study</td>
<td>Complementary relationships between incentives, authority (contractual governance) and trust to govern complex supply arrangements.</td>
</tr>
<tr>
<td>Mellewigt et al. (2007)</td>
<td>Empirical - survey</td>
<td>Trust serves as a moderating variable that influences the direct relationship between control and coordination concerns and contract complexity. Trust will be at once a substitute of contractual complexity (regarding control concerns under low trust) and a complement of contractual complexity (regarding coordination concerns under high trust).</td>
</tr>
<tr>
<td>Vandaele et al. (2007)</td>
<td>Theoretical</td>
<td>Combination of contractual and relational governance mechanisms has positive effects on performance outcome for service delivery.</td>
</tr>
<tr>
<td>Zheng et al. (2008)</td>
<td>Empirical - case study</td>
<td>Positive, complementary effects of contractual and relational governance in long-term supply relationships. Trust and contracts have different development trajectories over time.</td>
</tr>
</tbody>
</table>

Table 4  Representative literature on governance interplay from 1992 to 2008

Table 4 summarises the main findings regarding the relationship of contractual and relational governance, from studies published between 1992 and 2008. An increasing number of research studies over the last decade have posed the question whether
contractual and relational governance mechanisms function as substitutes or complements (e.g. Poppo and Zenger, 2002; Klein Woolthuis et al., 2005). Other studies, although they do address the two governance mechanisms, treat them in terms of, for instance, legal contracts and social safeguards (e.g. Achrol and Gundlach, 1999) or control and trust (e.g. Das and Teng, 2001). However, it can be argued that the relationship between both governance mechanisms could be richer than this dichotomy would suggest, as little is known about the interplay between both governance mechanisms and their impact on overall performance (Puranam and Vanneste, 2009; Vandaele et al., 2007). For example, whilst Poppo and Zenger’s (2002) study has drawn out the relationship between both governance mechanisms, they have not investigated the impact of previous exchange experiences on governance mechanisms and their specific interplay. In this context, Ryall and Sampson (2009) argue that overall contract detail increases when both parties have had repeated interactions in the past. In other words, they make the claim that increased relational governance that has been built up through previous exchanges, enables parties to accept the inclusion of more detailed contract terms.

Whilst some research studies have distinguished between various forms of trust, such as intentional and competence trust (e.g. Klein Woolthuis, 2005), limited research has been undertaken regarding the distinct trust levels of inter-personal and inter-organisational trust. That is, previous studies on the relationship between both governance mechanisms deployed an overarching and rather general concept of trust, thereby failing to distinguish between the two dimensions inherent in inter-organisational relationships.

Moreover, previous empirical studies have reviewed governance interplay in rather short-term relationships (or repeated short- to medium-term relationships). Hence, there have been few insights into the interplay between both governance mechanisms in long-term relationships such as Public Private Partnerships spanning up to 30 years. Furthermore, the majority of previous studies have adopted a rather static analysis of the interplay between both governance mechanisms by focusing on the phenomenon at a certain point in time during the relationship and by doing so they have neglected the dynamics of both governance mechanisms and their interplay over time.
A limited number of empirical studies on the relationship between both governance mechanisms have deployed data from both buyer and supplier organisations. In fact, the results of a study by Vandaele et al. (2007) indicates that previous research has most frequently studied the interplay of the governance mechanisms by relying solely on data collected from the buyer organisation. Hence, they argue that further research should incorporate data from a supplier perspective too, that is, adopting a dyadic relationship perspective. Whilst the studies reviewed above represent a mixture of countries, only limited research has been undertaken regarding the interplay of contractual and relational governance in the United Kingdom. For example, Bennett and Robson’s (2004) empirical study investigated the roles of trust and contract in the supply of business advice in the UK. Additionally, a review of the research methods used by past studies reveals a strong preference for quantitative research methods such as surveys (e.g. Lui and Ngo, 2004). However, more recently empirical studies (e.g. Klein Woolthuis et al., 2005; Zheng et al., 2008) have started to deploy case study methodology to explore the details of the interplay between contractual and relational governance.

In conclusion, although previous studies have suggested that contractual and relational governance should be considered as complementary mechanisms (Larson, 1992; Poppo and Zenger, 2002) and have investigated their positive effects on overall relationships performance (Poppo and Zenger, 2002), very little research has explored the details and dynamics of this interplay in long-term, inter-organisational relationships (Klein Woolthuis et al., 2005).
2.5 Literature Synopsis: Conceptual Framework and Research Questions

2.5.1 Conceptual framework

This section introduces the conceptual framework as derived from the literature review, and the research aim and objectives. The framework incorporates the relationships between the main theoretical concepts and is developed iteratively.

Figure 6 Initial conceptual framework

Figure 6 depicts again the initial conceptual framework that distinguishes between the core concepts of interest, as previously shown in Chapter One: Introduction. Contractual and relational governance mechanisms interact over time in a dyadic supply relationship between public buyer and private supplier. Contractual governance, in this research, refers to the collection of those deliberate inter-organisational mechanisms that are manifested in formal (i.e. contractual, by law enforceable) arrangements. Such phenomena can be explicitly observed in the form of written documents and include, for instance: service level and concession agreements.

In contrast, relational governance in this study, refers to the collection of inter-organisational mechanisms that are manifested in socially derived ‘arrangements’, such as: norms, customs and practice. These phenomena are not, for the most part, directly accessible through written documents. They include social processes that promote norms of: flexibility, solidarity, personal bonding and implicit understandings and are not necessarily sanctioned through formal positions (i.e.
In addition, the research investigates different governance combinations, comprising contractual and relational governance mechanisms, at different points in time and the impact of governance trajectories, the path of contractual and relational governance mechanisms and their interplay describe over time, on overall performance. Figure 6 is re-examined later in light of the research findings in Chapter Six: Discussion.

2.5.2 Derivation of research questions

The literature synopsis and the explanation of the theoretical framework have provided identification of the gaps in the current theory. From this, the following central research question can be posited.

What are the dynamics of contractual and relational governance mechanisms in supply arrangements?

This central research question contains within it a number of concepts and linkages between them as illustrated in the initial conceptual framework (Figure 6). In order to construct a researchable study area, the central research question is broken down into research sub-questions. These research sub-questions equally represent gaps in the theory (Table 5).
<table>
<thead>
<tr>
<th>Research sub-question</th>
<th>Research aim</th>
<th>Literature source</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the role of contractual governance in supply arrangements over time?</td>
<td>Examine the role of contractual governance in supply relationships over time</td>
<td>Arrighetti et al., 1997; Luo, 2002</td>
<td>Limited evidence of the roles of contractual governance over time in inter-organisational relationships</td>
</tr>
<tr>
<td>2. What is the role of relational governance in supply arrangements over time?</td>
<td>Examine the role of relational governance in supply relationships over time</td>
<td>Macneil, 1980; Vandaele et al., 2007</td>
<td>Limited empirical evidence of the roles of relational governance over time in inter-organisational relationships</td>
</tr>
<tr>
<td>3. What are the governance combinations at different points in time?</td>
<td>Identifying governance combinations at different points in time</td>
<td>Poppo and Zenger, 2002; Klein Woolthuis et al., 2005</td>
<td>Limited theoretical and empirical evidence about the composition of governance combinations in inter-organisational supply relationships</td>
</tr>
<tr>
<td>4. What impact do different governance trajectories have on the overall performance?</td>
<td>Examining governance trajectories and their impact on overall performance</td>
<td>Poppo and Zenger, 2002; Halldórsson and Skjøtt-Larsen, 2006</td>
<td>Extant literature explores some aspects of governance development (dynamics), but mostly adopts a static viewpoint; limited evidence on performance implications</td>
</tr>
</tbody>
</table>

**Table 5**  Research questions and literature sources

Contractual and relational governance combinations are investigated across different points in time during the long-term supply relationship. Both governance mechanisms are assigned different scores, ranging from low to medium to high significance, resulting in various governance combinations over time. Inter-organisational governance trajectory, in this study, refers to the path contractual and relational governance mechanisms and their interplay describe over time. Overall performance is measured using a composite measure examining overall satisfaction with overall performance (Poppo and Zenger, 2002), financial (on budget) and operational (on time) performance measures (Klein Woolthuis et al., 2005).
2.6 Chapter Summary

This chapter started by examining buyer-supplier relationships from a transaction cost economics and social capital theory perspective. Then, contractual and relational governance were compared and contrasted and their interplay examined, by considering the arguments for their substitutional and complementary effects. Agency theory was presented and examined as a tool to explain how information asymmetries in buyer-supplier relationships lead to incomplete contracts. Lastly, the initial conceptual framework and emerging research questions derived from the extensive literature review were introduced. The next chapter presents the philosophical and methodological considerations that underpin the empirical research.
CHAPTER THREE: RESEARCH PHILOSOPHY AND METHODOLOGY

Introduction to Chapter

This chapter provides an overview of the research philosophy and methodology adopted in this thesis. The chapter begins by outlining a range of various philosophical positions and then continues to discuss the research approach and process. The following sections explain the purpose of the research, examining the case study research strategy, and responds to criticism of the case study strategy. Section 3.4 describes the case study design, considering issues such as multiple case design, case selection and unit of analysis. The section also discusses long-term supply relationships and describes Public Private Partnerships as the context in which the current research is set. Section 3.5 presents the chosen data collection techniques. Section 3.6 explains the criteria of research credibility which will be addressed in this research. The chapter concludes with the explanation of research data analysis and interpretation within and across cases.

3.1 Paradigm Plurality in Management Research

A paradigm is defined as a “basic set of beliefs that guides action” (Guba, 1990, p.17), hence referring to the beliefs that guide the research process. Thomas Kuhn’s seminal work ‘The Structure of Scientific Revolutions’ (Kuhn, 1970) was largely responsible for popularising the term ‘paradigm’. A paradigm guides the research efforts and directions of scientific communities, providing a framework into which facts and ideas can be organised and evaluated (MacKenzie and House, 1978). Three interconnected concepts – ontology (considers questions of the subject of being), epistemology (theory of knowledge) and methodology (focuses on the way in which knowledge of the world is obtained and investigated) – form a paradigm. Social sciences, in contrast to the mature sciences such as physics and chemistry, are often described as ‘pre-paradigmatic’ (Kuhn, 1970). Thus, researchers in the field of management are diverse in their approaches, applying a range of various paradigms. Therefore, a closer look at different major paradigms and perspectives is appropriate at this point to appreciate the background and assumptions of these philosophies.
3.1.1 Positivism

Positivism emerged from the work of, for example, Auguste Comte, David Hume and Immanuel Kant, and is predominantly found in physical sciences. This philosophy assumes that the social world exists externally and its properties are being measured through objective methods, rather than being inferred subjectively through reflection or intuition (Easterby-Smith et al., 2002). Positivism “identifies cause and effect through ‘the constant conjunction’ of events, resulting in what has been called the ‘covering law’ or ‘law explanation’ orthodoxy” (Ramsay, 1998, p.164). The positivistic assumptions regarding ontology and epistemology can be characterised as follows: (i) an ontological assumption that reality exists externally and objectively, and (ii) an epistemological assumption that knowledge is only significant if it emerged from observation of this external reality.

Positivism is grounded on “at least five assumptions that are difficult to maintain” (Lincoln and Guba, 1985, p.28). Table 6 outlines the five proposed assumptions. The application of the positivistic standpoint to research in social systems, including business systems, is highly problematic as these five assumptions are hard to fulfil in such systems.

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A single, tangible reality</td>
<td>Ontological assumption that a reality exists which can be divided into pieces capable of being studied independently and the sum of the parts accounts simply as the whole.</td>
</tr>
<tr>
<td>Separating observer from the observed</td>
<td></td>
</tr>
<tr>
<td>Temporal and contextual independence of observations</td>
<td>The truth at one time and place may, under appropriate circumstances (such as sampling), also be true at another time and place.</td>
</tr>
<tr>
<td>Linear causality</td>
<td>Means that there are no effects without causes and no causes without effects.</td>
</tr>
<tr>
<td>Value freedom</td>
<td>The methodology guarantees that the results of an inquiry are essentially free from the influence of any value systems, for instance, bias in any form.</td>
</tr>
</tbody>
</table>

Table 6  Assumptions of positivism

Positivism also assumes fully ‘closed systems’, i.e. “in which an event of type $a$ is invariably accompanied by an event of type $b$”, which according to Bhaskar (1975, p.70) exist when the following three conditions – extrinsic condition, intrinsic condition and non-additive principle - are fulfilled (Table 7). Conditions of closure are rarely possible in the social sciences and Sayer (1992) states two reasons for the
openness of social systems. Firstly, human actions modify the configuration of social systems and thereby disregard the extrinsic condition. Secondly, the learning capacity of human beings and the possibility to self-change violates the intrinsic condition.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extrinsic condition</strong></td>
<td>“A closure thus depends upon either the actual isolation of a system from external influences or the constancy of those influences” (Bhaskar, 1975, p.74). Given the enormous number of external influences within inter-organisational relationships, this condition is highly compromised.</td>
</tr>
<tr>
<td><strong>Intrinsic condition</strong></td>
<td>Bhaskar (1975) argues in favour of the necessity for the ‘internal structure’ of the objects, individuals, or processes making up the system to be constant. He cites that the intrinsic condition “[…] either the absence or the constancy of internal structure must also be a condition for closure” (Bhaskar, 1975, p.75). This condition is hard to fulfil in social systems where humans, reflexive beings who perceive events and experiences, are present.</td>
</tr>
<tr>
<td><strong>Non-additive principle</strong></td>
<td>Bhaskar (1975) argues that closure can only be assured if the overall performance or behaviour of the system can be derived as an additive principle of the behaviour, or states of the individual system components (Ramsay, 1998). That means that in addition to the two above mentioned conditions, no other factors must influence the object being studied.</td>
</tr>
</tbody>
</table>

Table 7 Three conditions of positivism

In conclusion, positivism assumes that natural and social sciences measure independent facts about a single apprehensible reality composed of discrete elements whose nature can be known and categorised (Tsoukas, 1989; Guba and Lincoln, 1994). Data and its analysis are value-free and data does not change because it is being observed. Positivistic researchers separate themselves from the world they study, while researchers within the three other paradigms – post-positivism, critical theory, and interpretivism - acknowledge that they have to participate in real-world life to some extent so as to better understand and express its emergent properties and features. A positivistic view is inappropriate when approaching a social science phenomenon which involve humans and their real-life experiences, for treating respondents as independent, non-reflective objects “ignores their ability to reflect on problem situations, and act on these” in an interdependent way (Robson, 1993, p. 60).

### 3.1.2 Critical theory

Critical theory of what came to be called the Frankfurter School (Outhwait, 1987) assumes apprehensive social realities, incorporating historically situated structures.
The work of Juergen Habermas, a German philosopher and sociologist, is essential for most critical theorists. Research inquiries are often characterised by long-term ethnographic and historical studies, aiming at critiquing and transforming, for instance: social, political, economic, gender and ethic values. According to Guba and Lincoln (1994), critical theory’s assumptions are essentially subjective and thus knowledge is grounded in social and historical routines. Therefore, research is value-dependent and not value-free (Guba and Lincoln, 1994).

Central themes which critical researchers might explore include the scientific study of social institutions and their transformations through interpreting the meanings of social life; the historical problems of domination, alienation, and social struggles; and a critique of society and the envisioning of new possibilities (Fay, 1987, cited in Creswell, 1998). Critical theory researchers see research as a catalyst for change, applying, for instance, action research as a means for bringing about changes. Yet, this paradigm is not appropriate for inter-organisational research unless the researcher aims to be a “transformative intellectual” who liberates people from their historical mental, emotional and social structures (Guba and Lincoln, 1994, p.112).

3.1.3 Interpretivism

The paradigm of interpretivism was developed by philosophers largely in reaction to the application of positivism to the social sciences (Easterby-Smith et al., 2002). The premise of interpretivism is that reality is merely a social construction; and not objective and exterior. Mir and Watson (2001) note that phenomena studied by interpretivistic researchers only exist to the extent that they are studied and interpreted by them and that there is no underlying objective or ultimate truth. Therefore, interpretivistic researchers are concerned with human interpretations of meanings perceived in phenomena and events, rather than events themselves. Consequently, from an interpretivistic standpoint it is logical that different researchers observe different things and offer deviating explanations. Moreover, Kuhn (1970) argues that researchers interpret findings according to their own paradigm, shaped by previous research experience, beliefs and assumptions. Interpretivism argues “that people, and the physical and social artefacts that they create, are fundamentally different from the physical reality examined by natural science. Unlike atoms, molecules, and electrons, people create and attach their own
meanings to the world around them and to the behaviour they manifest in that world” (Lee, 1991, p.347). Lee (1991) concludes that the observing researcher must interpret this empirical reality regarding the meaning for the observed people.

The interpretive school of thought has a large following, found generally in (i) Hermeneutics, (ii) Phenomenology, and (iii) Ethnomethodology, as briefly outlined in Table 8.

<table>
<thead>
<tr>
<th>Interpretivistic schools</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hermeneutics</strong></td>
<td>Hermeneutical scholars applied the interpretive approach to understand literary and religious texts (Lee, 1991). Hermeneutics are motivated by the question of how readers of a text, especially those who belong to a different time and culture from the writer of the text, interpret the text meanings originally implanted in it, where other portions of the text itself are the primary, or sometimes the only, cross-referencing tool available (Lee, 1991). Hermeneutical research can be predominantly found in fields such as anthropology, history, organisational studies, and sociology.</td>
</tr>
<tr>
<td><strong>Phenomenology</strong></td>
<td>Max Weber's well known ‘postulate of subjective interpretation’ is a central work to this school of thought (Schutz, 1954). Schutz (1954) notes that “the postulate of subjective interpretation has to be understood in the sense that all scientific interpretations of the social world can, and for certain purposes, must refer to the subjective meaning of the actions of human beings from which social reality originates” (p.270).</td>
</tr>
<tr>
<td><strong>Ethnomethodology</strong></td>
<td>According to Lee (1991), the interpretive approach in the field of anthropology is equivalent with ethnography; an interpretative study of the behaviour of human subjects in their local settings. Anthropologists seek to capture the meanings of the local behaviour in the eyes of the human subjects themselves (Lee, 1991). Different responses can be found to the question of how anthropologists go about capturing and interpreting the cognitive understanding held by a native.</td>
</tr>
</tbody>
</table>

Table 8 Interpretivistic schools

In conclusion, the interpretivistic orientation assumes that no research findings can be considered objectively and theories are rather an act of researcher’s generation than of formalisation of underlying reality (Mir and Watson, 2001).

3.1.4 Post-positivism – critical realism

A growing number of researchers argue the need for a change in direction away from positivism “as the only accepted vehicle for knowledge acquisition, particularly for the social science” (Hirschheim, 1985, p.32). Some refer to it as post-positivism, challenging the limitations of positivism. Realism has a long history in natural sciences, but can be considered comparatively new in social sciences (Outhwaite, 1987). It has been developed within social science under the paradigm of post-
positivism as critical realism. More recently it refers to the community associated primarily with the work of Roy Bhaskar (e.g., ‘A realist theory of science’, 1975) becoming one of the major strands of social scientific method.

Critical realism can be seen as the philosophical thesis that a mind-independent reality, which has its own inherent order, exists (Outhwaite, 1987; Sayer, 1992). Although a real world driven by natural causes exists, it is impossible for human beings to completely perceive it with their imperfect sensory and intellectual capabilities (Guba, 1990; Cook and Campbell, 1979). Therefore, “things exist and act independently of our descriptions, but we can only know them under particular descriptions. […] Science […] is the systematic attempt to express in thought the structures and ways of acting of things that exist and act independently of thought” (Bhaskar, 1975, p.250). Furthermore, Easton (1998) argues that we are not debating about a naïve reality, which is easy to explore or self-evident, challenging the argument that reality is socially constructed. Moreover, he suggests that researchers should critically and objectively examine ways to uncover ‘reality’ rather than assume that it is an entirely social construction in the mind of the researcher.

Bhaskar (1975) notes that “science aims to discover structures and mechanisms underlying observable processes in the world; causality is to be analysed in terms of the tendencies of things rather than the conjunction of events or phenomena” (p.28). Therefore, critical realism does not, like positivism, artificially produce “constant conjunctions” (Steinmetz, 1998, p.176). Steinmetz (1998) argues that “scientists rely on experiments to create closed systems, since most domains of nature – and not just social systems – are open systems” (p.176). Open systems are typified by events which are subject to diverse causal variations and are not like closed systems where events invariably follow a determined and recurrent pattern (Bhaskar, 1975). In addition, he states that the application of “knowledge gained through experiments to the outside world implies that the same causal laws are operative inside and outside the laboratory” (Steinmetz, 1998, p.176). “The experimenter is responsible for triggering the mechanism under study and preventing interference from other mechanisms, but she does not create the mechanism that is revealed by the sequence of events. The argument thus suggests an ontological difference between the operation of causal mechanisms and the patterns of events they codetermine. Only if
we assume that underlying causal mechanisms are independent from the events they generate can we assume that they endure and continue acting outside of the experimentally closed conditions which allow scientists to identify them empirically” (Steinmetz, 1998, p.176). In contrast to the positivistic standpoint, Bhaskar (1975) notes that within critical realism, a law is not a constant conjunction of events but the characteristic pattern of activity, or tendency, of a mechanism.

Kwan and Tsang (2001) state that critical realists believe in the “possibility of progress towards a true account of phenomena”; theories, observations and methods are all fallible as reality exists independently of our minds (p.1165). Additionally, they argue that “verification and falsification are never conclusive, especially in social science” (Kwan and Tsang, 2001, p.1165). Recent debates such as those between Mir and Watson (2000, 2001) and Kwan and Tsang (2001) highlight the existing uncertainty about the differences of constructivism (phenomenology) and critical realism and the various interpretations of their respective branches.

Tsang and Kwan (1999, p.762) argue that critical realism is based on three key points:

i) The reality to which scientific theories primarily aim to refer is the structures and mechanisms of the world, rather than empirical events. Structures have been defined as sets of internally related objects and mechanisms as ways of acting (Sayer, 1992).

ii) Underlying structures and mechanisms are only contingently related to observable events.

iii) Although scientific knowledge of reality, especially social reality, is never infallible, it is still possible to acquire such knowledge through creative construction and critical testing of theories.

Therefore, critical realism refers to any position that maintains that there exists an objectively knowable, mind-independent reality, whilst acknowledging the roles of perception and cognition. In other words, given the complexity of the social science world, the knowledge that realism researchers obtain is considered real but fallible and theory-laden. A critical realist stance is also appropriate for the phenomena under study as the organisations, individuals and relationships involved are not
closed mechanistic systems. Finally, realism believes that there is a ‘real’ world to
discover even though it is only imperfectly apprehensible (Outwaithe, 1976;
Tsoukas, 1989; Guba and Lincoln, 1994). That is, perception is not reality as
constructivists and critical theorists might assert, but instead, a perception for realists
is a window onto reality from which a picture of reality can be triangulated with
other perceptions. In contrast, constructivists and critical theorists consider that there
are many realities, while realists believe that there is only one reality although
several perceptions of that reality must be triangulated to obtain a better picture of it.

3.1.5 Paradigm summary

In summary, paradigms justify and promote certain types of study and, to a lesser
extent, dictate the research design and methods. For instance, the positivistic
researcher may seek an explanation, whilst the interpretivistic researcher may seek
an understanding. Furthermore, research methods tend to vary between the
paradigms with a general trend from quantitative methods on the left-hand side of the
table below to qualitative approaches on the right-hand side (Table 9). Table 9
summarises the philosophical assumptions which support the four different
paradigms of social sciences relating to ontology, epistemology and methodology.
However, this strict division has been over-emphasised in the methodology literature,
defectively proposing that, for example, the interpretivist paradigm is incompatible
with quantitative methods and that the positivist paradigm is incompatible with
qualitative methods. Methods should, of course, reflect the ontological and
epistemological position of the researcher, but other factors, such as practicalities,
must also be considered.
### Research Paradigms

<table>
<thead>
<tr>
<th>Ontology</th>
<th>Positivism</th>
<th>Post-positivism</th>
<th>Critical Theory</th>
<th>Interpretivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naïve Realism - social world is external and objective to individual cognition</td>
<td>Critical Realism – social world is external and objective to individual cognition, but it can never be perfectly apprehended</td>
<td>Historical Realism – reality is shaped by social, political, cultural, economic, ethnic and gender values.</td>
<td>Relativism – local and specific constructed realities</td>
<td></td>
</tr>
<tr>
<td>Dualism/Objectivism – implies the separation of the subject and object of knowledge, consequently the observer is uninvolved during the research process. Meaning exists apart of any consciousness.</td>
<td>Modified Objectivism – separation of the subject and object of knowledge is largely abandoned as impossible to maintain but objectivity remains an ‘ideal’.</td>
<td>Constructionism - meaning comes into existence through the interaction of investigator and investigated object. Investigator’s values influencing the inquiry, resulting in ‘value mediated’ findings.</td>
<td>Subjectivism – meaning is imposed on the object by the subject. Knowledge is created as the investigation proceeds.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>Methodology (e.g.)</th>
<th>Experiment</th>
<th>Statistics</th>
<th>Simulation</th>
<th>Survey</th>
<th>Experiment</th>
<th>Survey</th>
<th>Case Study</th>
<th>Action Research</th>
<th>Feminist Studies</th>
<th>Case Study</th>
<th>Ethnography</th>
<th>Grounded Theory</th>
<th>Phenomenological Research</th>
<th>Case Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Findings are true.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Findings are probably true.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Findings are value mediated.</td>
<td></td>
<td></td>
<td>Findings are created.</td>
</tr>
</tbody>
</table>

1 including (but not limited to) paradigms such as neo-Marxism, feminism, materialism, and participatory inquiry

**Table 9** Research paradigms in management research
*(adapted from Guba and Lincoln, p.203 in Denzin and Lincoln, 1998)*
3.2 Research Approach and Process

Before deciding upon the methodological choices, the research approach and process should be shortly introduced. The methodology literature tends to distinguish between two approaches - deductive and inductive. A deductive approach follows from a positivistic philosophy, testing a hypothesis derived through deductive reasoning, whilst an inductive approach follows from an interpretivistic philosophy which means formulating theory from empirical data. Deductive research is mostly based upon quantitative research data, whereas inductive research mostly relies on qualitative research data. In general, the inductive research approach, in contrast to the deductive approach, is seen as more flexible in addressing any unexpected issues that may arise during the research process.

Yet, the research approach should not be seen as a rigidly defined category, as research often involves both approaches. For instance, theory leads to observations which in turn lead to identification of new patterns which lead to the development of new theories. This process has been described by Dubois and Gadde (2002) as “systematic combining” or “abduction”. In reality, research on inter-organisational relationships is often neither purely inductive nor deductive. Therefore, the process of this research study should be described as an iterative learning process employing deductive and inductive elements rather than a systematic process of either deduction or induction. To some extent the empirical fieldwork parallels the theoretical conceptualisations in this research study. The abductive approach presents a more accurate picture of the cumulative research process which is interwoven with the development of concepts and empirical findings of this research. The logic of abduction is that the research process commutes between theories and practice as an interweaving dialogue between theory and empirical findings. Figure 7 below provides an overview of the research approach and process adopted in this thesis with reference to the iterative process connecting various stages of refinement of the conceptual framework during the phases of theoretical and empirical investigations. In addition, Figure 7 reflects the research process and strategies employed by this research. Published peer-reviewed journal articles and book chapters are outlined in Appendix A.
Figure 7  The research process and the development of the conceptual framework as an iterative process
3.3 Research Strategy

A research strategy considers the general orientation of conducting research (Bryman, 2001). Each research strategy has its advantages and disadvantages, depending on the three conditions as proposed by Yin (2003) – (i) type of research question, (ii) the control a researcher has over behavioural events, and (iii) the focus on contemporary or historical phenomena (p.5).

In order to focus the research project, it is helpful to consider the purpose of the research, the nature of the research question, and the research strategy (Marshall and Rossman, 1989). Table 10 below shows the possible purposes of research – illustrating that research can be classified not only in terms of the strategy used, but also in terms of the objectives and nature of the enquiry itself.

<table>
<thead>
<tr>
<th>Purpose of study</th>
<th>Nature of research question</th>
<th>Research strategy</th>
<th>Data collection technique</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploratory</strong></td>
<td>Investigate little-understood phenomena Seek new insights</td>
<td>Case Study Field Study</td>
<td>Participant observation In-depth interviewing Elite interviewing</td>
</tr>
<tr>
<td><strong>Descriptive</strong></td>
<td>Portray accurate profile of events, persons or situations Requires extensive previous knowledge of situations</td>
<td>Survey Field Study Case Study Ethnography</td>
<td>Participant observation In-depth interviewing Survey Document analysis</td>
</tr>
<tr>
<td><strong>Explanatory</strong></td>
<td>Seeks an explanation of situation or problem, usually in the form of a causal relationship</td>
<td>Experiment Multisite Case Study History Field Study Ethnography</td>
<td>Participant observation In-depth interviewing Survey Document analysis</td>
</tr>
<tr>
<td><strong>Predictive</strong></td>
<td>Predict the outcomes of the phenomenon Forecast the events and behaviours resulting from the phenomenon</td>
<td>Experiment Quasi-experiment</td>
<td>Survey (large sample) Kinesics Content Analysis</td>
</tr>
</tbody>
</table>

Table 10 Purposes of inquiry
(adapted from Marshall and Rossman, 1989, p.78)

This study suggests an exploratory study to investigate the little known phenomena of governance mechanisms in inter-organisational relationships. Therefore, the research strategy needs to be able to capture the inherent complexities and dynamics of the investigated public-private relationships. Moreover, the research strategy has
to ensure access to different actors involved in such complex supply arrangements. Consequently it is appropriate to consider the case study research strategy.

3.3.1 Case study

The case study method provides the researcher with an opportunity for collecting empirical data with consideration given to the complexity of the real-life setting. Case studies are a preferred method for developing new theories or extending and testing existing theories in situations requiring a thorough understanding of what is happening (Stake, 1978; Meredith, 1998; Eisenhardt and Graebner, 2007; Dubois and Araujo, 2007).

Robson (2002) defines a case study as “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence” (p.178). Case research may include quantitative as well as qualitative data collection methods, such as observations, questionnaires or interviews (Yin, 1981, 2003; Stake, 1994, 1995; Meredith, 1998) and consider single or multiple levels of analysis (Yin, 2003). Moreover, case studies focus on numerous variables and relationships and cover all conceivable aspects which are available. In contrast, a survey strategy focuses normally on a few variables in a large population (Hellstroem and Nilsson, 2006). Voss et al. (2002) argue in favour of case study research as it provides the opportunity for researchers to collect objective data “with greater accuracy and reliability than in survey research, as they can have direct access to the original data sources” (p.208).

According to Tellis (1997), case studies can be seen as satisfying the three tenets of the qualitative method: describing, understanding, and explaining. Therefore, case studies are particularly useful when exploring new areas of research (Eisenhardt, 1989b). Equally, the rich qualitative and quantitative data sets generated (Yin, 2003) are particularly important in order to measure complex and intangible phenomena (e.g. relationships, trust) and to look beyond organisational boundaries, adopting a contextualised view (Pettigrew, 1985). However, case studies are also applicable to provide description and prediction on a smaller scale (Ellram, 1996). Ellram (1996) notes that, for instance, single or multiple case studies are applicable to describe a phenomenon or to “predict outcomes based upon past occurrences in similar cases”
Further justification for selecting the case study strategy comes from its widespread use in the existing literature in the field of the current research (e.g. Halldórsson and Skjøtt-Larsen, 2006; Klein Woolthuis et al., 2005; Olsen et al., 2005).

In summary, case study research as the chosen research strategy in this thesis has been supported by its three major strengths which had been first identified by Benbasat et al. (1987) and later reported by Meredith (1998). Firstly, the phenomenon may be studied in its natural setting, generating meaningful and relevant theory. Secondly, the case study methodology answers ‘why’ (issues of understanding), rather than just ‘what’ (issues of identification) and ‘how’ (issues of explanation) questions. These questions can be answered with a relatively full understanding of the nature and complexity of the phenomenon. Thirdly, case study research lends itself primarily to exploratory research, where the phenomenon is yet to be understood as previously described.

3.3.2 Case study criticism

The case study method is viewed with scepticism and criticism by a number of researchers (Yin, 2003). The following section addresses a number of such criticisms.

Bryman (1989), Eisenhardt (1989b) and Yin (2003) note that case study strategy is often criticised for its lack of generalisability. This criticism is based on the assumption of statistical generalisation that treats the case as a sample of one (Bryman, 1989). Yin (2003) argues that “case studies, like experiments, are generalisable to theoretical propositions and not to populations” (p.10). Multiple cases strengthen the research results by replicating pattern-matching, hence increasing confidence in the robustness of the theory. Some of the case study criticisms, such as issues of time, cost and access hurdles, are based on the requirements of direct observation (Bryman, 1989; Meredith, 1998). Another source of criticism is validity and a lack of rigour caused by the investigator’s potential subjectivity and biased views which might influence the direction of findings and conclusions (Seuring, 2008). Yin (2003) proposed three actions which help to overcome that problem: (1) using multiple sources of evidence, (2) establishing a
chain of evidence, and (3) having a draft case study report reviewed by key informants.

In conclusion, to reduce the case study’s weaknesses, Eisenhardt (1989b), Ellram (1996), Meredith (1998) and Yin (2003) advocate a systematic and analytical approach to conducting case study research. Consequently, the following section explains the approaches to designing, conducting, analysing and reporting case study research in a systematic way to improve the rigour of the case study process.

3.4 Case Study Design

The following sub-sections explain the chosen case design, the case selection by introducing the chosen Private Finance Initiative, and the unit of analysis.

3.4.1 Multiple case design

One of the fundamental issues in case study design and analysis is to determine whether a single case study or multiple case studies should be applied (Yin, 1981, 2003). This thesis applies multiple case studies design as one of the main aims of the research is to investigate a range of different themes and not an extraordinary or unusual theme alone. It would not seem appropriate then to use the single case study design which “like one experiment, is suitable when that case represents a critical case to test a well-formulated theory, an extreme or unique case, or a case which reveals a previously inaccessible phenomenon” (Ellram, 1996, p.100). The single case study's limitation is the generalisability of the conclusions, models or theory developed from the case study (Voss et al., 2002). Moreover, a single case study may encounter several potential problems (Leonard-Barton, 1990) such as the risk of misjudging the representativeness of single events and the risk of exaggerating easily available data which will be mitigated when data is compared across cases (Voss et al., 2002).

In contrast, “multiple cases, like multiple experiments, represent replications that allow for development of a rich, theoretical framework” (Ellram, 1996, p.102). This view is supported by Eisenhardt and Graebner (2007), arguing that multiple case studies create robust theory by grounding research in rich empirical evidence. Consequently, Ellram (1996) notes that multiple case studies are designed to either
predict similar results among replications, or show contrasting results, but for predictable, explainable reasons. The multiple case study approach, as noted by Eisenhardt (1989b) and Voss et al. (2002), is well suited for the empirical development of testable theories and, like other qualitative research methods, “[is] particularly oriented towards exploration, discovery, and inductive logic” (Patton, 1990, p. 44). The multiple case study strategy was adopted to strengthen the external validity of findings from a single case, thus ensuring that one case is not unique in any way and helping to guard against observer bias (Eisenhardt, 1989b; Yin, 2003; Voss et al., 2002).

### 3.4.2 Case selection

An important consideration when applying multiple case study research is case selection or sampling of cases. Case study sampling differentiates itself from the traditional way of sampling, which is appropriate for survey research. Traditionally, probability sampling, such as random or stratified sampling, had to be drawn from a prior identified population (Eisenhardt and Graebner, 2007; Voss et al., 2002). Case study research relies on a different logic which selects cases on the basis of their potential contribution to the overall inquiry (Ritchie and Lewis, 2003), and does not intend to measure the incidence or phenomena within a wider population.

Yin (2003) notes that case studies, like experiments, are generalisable to theoretical propositions and not to populations or universes. In this sense, “the case study, like the experiment, does not represent a ‘sample’, and the investigator's goal is to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation)” (Yin, 2003, p.10). Furthermore, Eisenhardt (1989b) and Yin (2003) argue that in case research a sample of cases is often selected according to different criteria. Individual cases within a multiple case research will be selected (Voss et al., 2002); (i) to predict similar results (literal replication), or (ii) to produce contrary results but for predictable reasons (theoretical replication).

The number of cases within multiple case research is determined by new findings in each additional case. No additional cases should be investigated when the research encounters diminishing returns from incremental cases, interviews or when the research questions have been satisfactorily addressed by the investigated cases.
(Eisenhardt, 1991; Voss et al., 2002); thus researchers should stop adding cases when the point of ‘data-saturation’ or ‘closure’ is reached (Eisenhardt, 1989b; Glaser and Strauss, 1967). Moreover, Yin (2003) states that case studies apply replication rather than sampling logic, thus repeated evidence contributes little to the findings of the study.

The case selection is bound within the focus of this thesis, incorporating public-private supply arrangements, i.e. Private Finance Initiative (PFI) projects, because of their specific characteristics. A key consideration in selecting public-private arrangements as the empirical focus of the research is the opportunity this provides to review specific supply arrangements over an extended period of time. In other words, the buyer-supplier ‘lock-in’ inherent in public-private arrangements actually makes it particularly useful for exploring exchange dynamics. In the context of this research, exogenous legal frameworks such as European and national procurement laws, which include extensive regulatory frameworks, need to be taken into consideration for the chosen case studies. That is, the rigid and prescriptive regulatory frameworks, as found in all the investigated cases, underline the legal requirements, which manifest themselves in large numbers of performance clauses and prescriptive regulations.

Considering the myriad of extensive regulatory and legal frameworks, contractual governance was expected to feature heavily in these relationships. For confidentiality reasons, the actual contracts governing the investigated relationships were not accessed. However, detailed descriptions of contractual governance by case interviewees from the buyer and supplier side was collated with secondary data describing contracts in Public Private Partnerships such as H.M. Treasury’s reports on standardised PFI contracts (H.M. Treasury, 2004 and 2007). Generic components and the structure of these standard contracts could be studied using these standard form templates. These reports outline the various contract terms and clauses ranging from service availability to performance monitoring and price and payment mechanisms in the standard PFI contract version 3 and 4 which have been used for more recent PFI health infrastructure projects in the UK. The purpose of case studies is not to depict the frequency of occurrence of a specific phenomenon, but to highlight cases of theoretical and practical importance (Yin, 2003). On the other
hand, the thesis’ objective is to achieve cross-sector fertilisation of addressed research issues. In consequence, six case studies mirroring public-private arrangements are explored in depth to address the research aim and objectives of this research.

The three investigated case pairs represent three different sectors, (i) healthcare, (ii) emergency services, and (iii) waste management. The case study sectors were chosen to represent a variety of projects with different contract value, product/service mix and maturity of public-private arrangements in the specific sector. Early PFI projects were mainly focused on the provision of new hospitals in the UK. Over the last decade the UK Government has undertaken “the biggest hospital building programme in the history of the NHS”, delivering 70 new PFI hospitals (plus 23 hospitals financed through public capital) worth £5.3 billion which are already in operation (H.M. Treasury, 2008, p.5). Additional 34 hospitals (27 PFI and seven financed through public capital) worth £6.3 billion are currently under construction (H.M. Treasury, 2008). In contrast to the healthcare sector, PFI projects in the emergency services and waste management sector were deployed later. Each sector pair consists of the same private organisation, but different public organisation (Figure 8). Each sector pair represents an early and late public-private arrangement. For instance, the PFI project in the first healthcare case was advertised in the Official Journal of the European Union (OJEU) in 1994 while the second healthcare case PFI project was advertised in 2002.
The choice of public-private arrangements analysed was opportunistic and determined by access to the respective facilities. Access to the chosen cases was largely gained by networking with stakeholders of each case study to gain access to individuals in both public and private organisations. Networking was carried out at a variety of research centre events, project team meetings and by deploying exploratory interviews. The networking aspect of gaining access is similar to judgemental or snowball sampling in a more quantitative study.
<table>
<thead>
<tr>
<th>Case characteristics</th>
<th>Swindon Hospital</th>
<th>Oxford Hospital</th>
<th>Kirklees Waste Management</th>
<th>Surrey Waste Management</th>
<th>Gloucestershire Fire and Rescue Service</th>
<th>South Wales Fire and Rescue Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product-service provision</strong></td>
<td>Design, build, finance and operate (DBFO); construction of new hospital; hard (estate) and soft (e.g. cleaning, portering, catering) service FM (facilities management)</td>
<td>DBFO; construction of new hospital; hard (estate) and soft service FM</td>
<td>DBFO; construction of new waste treatment plants and stations; no waste collection</td>
<td>DBFO; construction of new waste treatment plants and stations; no waste collection</td>
<td>DBFO; construction of new training facility; hard (estate) and soft service FM</td>
<td>DBFO; construction of new training facility; hard (estate) and soft service FM</td>
</tr>
<tr>
<td><strong>OJEU advert</strong></td>
<td>Late 1994</td>
<td>Late 2002</td>
<td>Early 1997</td>
<td>Mid 1997</td>
<td>Mid 1998</td>
<td>Early 2000</td>
</tr>
<tr>
<td><strong>Financial close</strong></td>
<td>Late 1999</td>
<td>Late 2003</td>
<td>Early 1998</td>
<td>Mid 1999</td>
<td>Early 2001</td>
<td>Mid 2004</td>
</tr>
<tr>
<td><strong>Operate since</strong></td>
<td>Late 2002</td>
<td>Late 2006</td>
<td>Early 1998 (parallel build and operate phase)</td>
<td>Mid 1999 (parallel build and operate phase)</td>
<td>Early 2003</td>
<td>Late 2005</td>
</tr>
<tr>
<td><strong>Contract nature and value</strong></td>
<td>Non-standard contract; approx. £150m</td>
<td>Standard contract (version 3); approx. £150m</td>
<td>Non-standard contract; approx. £35m</td>
<td>Non-standard contract; approx. £100m</td>
<td>Non-standard contract; approx. £20m</td>
<td>Non-standard contract; approx. £10m</td>
</tr>
<tr>
<td><strong>Contract duration</strong></td>
<td>30 years</td>
<td>30 years</td>
<td>25 years</td>
<td>25 years</td>
<td>25 years</td>
<td>25 years</td>
</tr>
</tbody>
</table>

Table 11  Overview of key case study characteristics
Table 11 presents the key case study characteristics. The identities of all organisations and individuals involved in this research have been made anonymous to ensure confidentiality of data gathered. Although, inevitably, the PFI projects differ in some key aspects, all six cases feature established supply arrangements, meaning that at the time of the research all had reached the operate phase.

3.4.3 Public Private Partnership and Private Finance Initiative

Types of long-term buyer-supplier relationships are Public Private Partnerships (PPPs) and Private Finance Initiatives (PFIs) which bring together public and private organisations. These long-term relationships build the context of this research study as they offer a unique opportunity to review inter-organisational governance mechanisms over an extended life cycle of up to 30 years. Throughout the 1980s and 1990s, the UK in particular has seen a number of initiatives aimed at bringing the private sector into activities once thought the sole preserve of Government. These developments are summarised under the notion of New Public Management (NPM), stating that public organisations should adopt elements from the private sector modes of organising and managing (Hood, 1991; Dawson and Dargie, 2000).

Early approaches solely relied on the assumption that the best solution to public sector problems was simply to transfer as much of the activity as quickly as possible to the private sector. The private sector was often brought in with insufficient competition, regulation, and other requirements on service standards (Office of Government Commerce, 2002). Nowadays, public sector service provision has become more dynamic and diverse (Kooiman, 1993), whilst facing budgetary constraints and a corresponding pressure to become more effective and efficient (Bouckaert and Halachmi, 1995). Attempting to resolve this apparent contradiction, many governments have turned to private sector involvement in the financing, development and provision of public infrastructure facilities and services (Pietroforte and Miller, 2002). Successive UK governments have increasingly deployed Private Finance Initiative and Public Private Partnership investment vehicles as the principal method for procuring public sector capital projects and delivering associated services (Broadbent and Laughlin, 2005) by accessing private sector management expertise.
The PFI/PPP concept, following its development and proliferation in the United Kingdom, is augmenting in other European countries and beyond (Walder and Amenta, 2004). The declared aim of PFI is to secure better value for money, which means ‘quality’ services at ‘optimal’ cost and ‘optimal’ risk allocation for both contracting parties, by promoting increased contestability and diversity of provision. It is assumed that fierce competition within the private sector might lead to greater efficiency among private companies and hence to cost savings (Hall, 1998). By relaxing the emphasis on input specification and emphasising the specification of outputs and outcomes, PFIs aim to mobilise innovation and optimise whole-life cycle costs and quality to meet the public requirements (Walder and Amenta, 2004). A common characteristic of PFI projects is that they are concerned with core public services which are often politically sensitive, e.g. healthcare and education (Grout, 1997).

Empirical literature concerning value for money considerations and evaluations does not show consistency (Hall, 1998). With respect to risk transfer, most of the debates are centred around the types of risks transferred to the private sector (Hall, 1998; Heald, 2003; Broadbent and Laughlin, 1999) and when risks are transferred (Lonsdale, 2005). Along the same lines, no consistency is in place regarding the concept of risk transfer and its measurement (Hood and McGarvey, 2002). Besides the benefits of risk transfer, the public sector enjoys additional benefits such as improved delivery of projects with respect to time, cost and quality, elimination of over-specification, improved maintenance of public infrastructure and better delivery of public services (Dixon et al., 2005). Traditional public procurement can be characterised by separate contracts being let for build, maintenance and facilities management (FM). The long-term and integrated nature of PPP service contracts incentivises the contractors to consider the synergies between the design of an asset and its operating costs (Office of Government Commerce, 2002). However, empirical studies show limited evidence of future building flexibility and innovation delivered through PFI projects (Barlow and Koeberle-Gaiser, 2008; Caldwell and Roehrich, 2008).

Figure 9 illustrates a generic PFI project timeline incorporating the three project phases – bid/contract negotiation, build and operate phase.
In the bid/contract negotiation phase of the project the public sector authority advertises the scope of its project in the Official Journal of the European Union (OJEU). In response to this a number of private sector consortia, consisting of private organisations such as a construction company and various banks, prepare documents outlining their project solutions. The public sector is then responsible for selecting its preferred supplier with which it enters into contract negotiations. After the contract is signed, the build phase commences. Under a PFI, a specially formed private company, normally referred to as Special Purpose Vehicle (SPV), contracts with an authority to design, build, finance and operate a public asset, under a time and cost specific contract, the so called concession agreement (Figure 10).

Following the build phase, the SPV provides support services under a long-term contract and maintains the facility according to the public organisation’s specification. Once the operational period begins, the public authority pays the SPV for the provision of services such as cleaning and portering. This revenue stream, which is subject to deductions for poor performance, is used to repay debt, fund operations and provide a return to the investors. The research study’s focus is centred on the primary public-private supply relationship between the public sector authority, such as an NHS Trust, and the prime supplier, such as a construction company.
In summary, the majority of PFI research in the area of PFI contracting tends to focus on risk management or financial evaluation of PFI issues from a public sector management perspective (Froud, 2003; Froud and Shaoul, 2001; Ball et al., 2003), and much less attention is given to the understanding of inter-organisational governance issues. In addition, governance issues tend to be examined in the context of whether it is appropriate to involve private sector in the public sector service provision in the similar debate to outsourcing, privatisation and PPP.

3.4.4 Unit of analysis

The unit of analysis defines what the case is and is related to the way the research questions have been defined (Yin, 2003). Case studies are very suitable for studies in which interactions and relationships form the basic units of analysis (Dubois and Araujo, 2004). The unit of analysis adopted in this thesis is the public-private dyadic relationship between buyer and supplier in public-private supply arrangements, Private Finance Initiative (PFI) in the UK. The case study method applied in this research primarily focuses on contractual and relational governance mechanisms applied in the dyadic long-term relationship between public sector buyer and private sector supplier. However, the research does recognise that studying the dyadic
relationship will inevitably gain empirical observations about the broader influencing network of relationships, even if that broader network is not directly studied itself.

### 3.5 Data Collection

The following sub-sections explain the chosen data collection methods and the time horizon of this research.

#### 3.5.1 Semi-structured interviews

The case study data was primarily collected through semi-structured interviews with key informants from the buyer and supplier side knowledgeable about the topics of interest. Each individual case was constructed from interviews with both buyer and supplier organisations in order to incorporate convergent viewpoints. In general, interviews are one of the most important sources of case study information, whose key strength is the focus on the case study topic and the provision of insights into perceived casual inferences (Yin, 2003; Eisenhardt and Graebner, 2007).

The research of this thesis requires an interview style that uses a set of prepared questions in order to examine inter-organisational governance aspects, but also creates the atmosphere for open discussions which can explore around the topic. Therefore, the research adopts the semi-structured interview technique where a mix of open-ended questions and theory driven questions are employed. Consequently, when interesting avenues not directly pertaining to the interview questions arise, those lines of questioning are pursued, and comments noted. This interview type involves the implementation of a number of predetermined questions which are typically asked of each interviewee in a systematic and consistent order, while still allowing (in fact, expecting) the interviewee to develop and speak more widely on issues raised by the research (Berg, 2004).

In consequence, semi-structured interviews represent a useful compromise between the very formal structured approach and the informal conversation approach. The researcher can ensure that all relevant areas are covered in a systematic fashion when grouping and listing the topics to be covered in advance. Patton (1990) notes that interviews can be still kept fairly conversational and situational, allowing for reaction to responses that appear interesting and relevant to the overall research study.
Nevertheless, the researcher must ensure that this flexibility does not lead to the omission of central topics or a reduction in the comparability between cases (Patton, 1990). Therefore, the study design incorporates an interview guide (Appendix B) that helps to ensure that all interest areas are covered in a systematic and relatively consistent fashion by the end of the interview whilst allowing the interviewer to clarify questions that were uncertain to respondents. The areas of enquiry are defined based on a systematic review of the literature (Tranfield et al., 2003). This approach supports cross-case comparison after analysing the data on a within-case level. Additionally, this research counteracts bias by carefully wording interview questions, by avoiding leading questions and by not becoming overly dependent on a key informant. The use of tape recording can contribute towards reduction of researcher bias, especially if the evidence is presented verbatim rather than summarised (Voss et al., 2002).

Overall, 78 semi-structured interviews with different key stakeholders (lasting between 1 to 2 hours) were conducted over a period of 2.5 years. A detailed record of fieldwork can be found in Appendix C. The difference in numbers of interviews per case study depends upon the size of the organisation and the number of actors involved. Additionally, the complexity of the healthcare and waste management cases, involving various actors and complex infrastructure work, made it necessary to conduct more interviews than in the emergency services cases. The bandwidth of interviewees was necessary to capture a variety of perspectives and build rich insights relating to the six investigated case studies. The majority of interviews were carried out face-to-face. However a number of interviews were also carried out by telephone, largely through the choice of busy respondents, who were more prepared to find time for telephone interviews in their schedule.

According to Eisenhardt (1989b) and Yin (2003), using multiple interviewees in such a way reduces the risk of undue influence that an individual interview may have on a case study, brings a richer portrait of the case, and provides better data for analysis. Furthermore, data triangulation was achieved by collating additional documentation such as observation notes, company documents and government reports as provided by H.M. Treasure and Audit Office to enhance the study’s reliability and validity. Further explanation regarding the research credibility will be given in section 3.6.
3.5.2 Critical incident technique

This research deploys the critical incident technique (CIT) to collect the relevant data. Both case studies and CIT are particularly useful as exploratory methods for increasing knowledge about little-known phenomena (Eisenhardt, 1989b; Gremler, 2004). Furthermore, the CIT method is effective in studying phenomena for which it is hard to specify all variables a priori (Chell, 2004). The data was collected using semi-structured interview questions and the respondent-driven critical-incident technique (Flanagan, 1954; Gummesson, 2000; Bitner et al., 1990). While the former aims to deliver a global case description, the latter maps micro-level incidents as experienced by individual respondents. CIT also facilitates the reduction of complex qualitative data (Chell and Pittaway, 1998).

An incident or, for the purpose of the research, an event within a relationship is classed as critical when it has a positive or negative impact on the overall public-private supply arrangement. In other words, the events that were self-selected and reported by interviewees were chosen because they were considered to have had a significant impact on the overall supply relationship. Further data was triangulated incorporating buyer and supplier perspectives. Critical events in the investigated public-private supply arrangements included, for instance: team-building events, problems with contractual specifications and faulty service delivery. Interviewees were then asked to describe the use of contractual and relational governance mechanisms for these events. Seven events were chosen for each case study (with the exception of five critical events in the Oxford Hospital case) to collect a rich data set for each one identified and to represent the interplay of contractual and relational governance - two events for the bidding and contract negotiation phase, two events for the build phase and three events for the operate phase. The operate phase is characterised by three events as it represents the longest project phase. The number of events reflects the complexity of the phenomena under study (Flanagan, 1954).

The critical incident technique has been criticised on issues of reliability and validity (Chell and Pittaway, 1998). Respondent stories reported on critical events can be misinterpreted or misunderstood (Edvardsson 1992). CIT is a retrospective research method, relying on critical events being remembered by respondents and further requires the accurate and truthful reporting of them (Gremler, 2004). Considering the
lapsed time between the event happening and the subsequent description by the interviewee, the respondent may reinterpret the event (Johnston, 1995). These criticisms were counteracted by incorporating buyer and supplier perspectives and by having interviewees verify the case report. Figure 11 illustrates the initial conceptual framework including the seven events across the project phases.

![Initial conceptual framework including events across project phases](image)

**Figure 11** Initial conceptual framework including events across project phases

### 3.5.3 Time horizon

The time horizon of this research is important as the research investigates long-term public-private supply arrangements lasting over extended life cycles of up to 30 years. Therefore, this research adopted a longitudinal time horizon to gather data on the dynamic interplay of governance mechanisms along the extended relationship life cycles. Empirical data, deploying semi-structured interviews and the critical incident technique, was collected over a period of 2.5 years, but the time horizon in the cases represents up to 12 years. A longitudinal approach in its pure form (i.e. following the contract over 30 years) is impractical, thus retrospective data was collected using the respondent-driven critical incident technique, recognising critical events retrospectively.
3.6 Research Credibility - Reliability and Validity

Several authors (McCutcheon and Meredith, 1993; Yin, 2003) identify four criteria used to establish credibility of case study research. Reliability and validity have a number of different dimensions which should be clearly addressed by the researcher during the research design process.

**Construct Validity**

Construct validity addresses the extent to which correct operational measures are established for each construct under study (Yin, 2003). Construct validity is closely tied to research reliability and it has been a source of criticism because of potential researcher subjectivity. Three different remedies were proposed to counteract this: using multiple sources of evidence, establishing a chain of events, and having key informants review the case study research (Ellram, 1996).

**Internal Validity**

Internal validity is the extent to which the researcher can establish ‘a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships’ (Yin, 2003, p.34). In other words, internal validity asks whether the research design is capable of eliminating bias and the effect of extraneous variables (Easterby-Smith et al., 2002). Additionally, Eisenhardt (1989b) claims that the qualitative data obtained through case research helps to inform understanding of the relationships identified, and that this is “crucial to the establishment of internal validity” (p.542). To ensure internal validity, empirical findings were compared with the conceptual framework derived from the literature, applying the data analysis tool of pattern matching. Yin (2003) notes that internal validity is only an issue for explanatory case studies aimed at determining causality.

**External Validity**

External validity is concerned with whether a study’s finding can be generalised beyond the immediate case study (Yin, 2003; Cook and Campbell, 1979). The lack of generalisability has been a major criticism of case study research, which can be best addressed by replicating case studies and verifying patterns (Ellram, 1996). It should be noted that case study research relies on analytical generalisation and not
like survey research on statistical generalisation which seeks to generalise the result of a sample to a population (Yin, 2003). Analytic generalisation, in contrast to statistical generalisation, focuses on generalising a particular set of results to some broader theory (Yin, 2003). In other words, to the extent that the findings are consistent with a theory, that theory is supported. Findings to the contrary may support rival theories or suggest the need for a new theory.

Reliability

Reliability is defined as “the degree to which the finding is independent of accidental circumstances of the research” (Kirk and Miller, 1986, p.20). In other words, reliability addresses the repeatability of the case study, and whether replication is possible and will achieve the same results (Cook and Campbell, 1979; Miles and Huberman, 1994; Yin, 2003). Consequently, a study with high reliability can be replicated by others (Gummesson, 2000).

Table 12 summarises the different tactics and their operationalisation within this thesis. In conclusion, the different tactics employed within the thesis were primarily concerned with establishing consistency and visibility throughout the data collection and analysis phases. Consequently, the application of different tactics should ensure valid and reliable conclusions, thus strengthening the research credibility of this thesis.
<table>
<thead>
<tr>
<th>Test</th>
<th>Tactic</th>
<th>Research Phase</th>
<th>Operationalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construct Validity</strong></td>
<td>Use multiple sources of evidence</td>
<td>Data collection</td>
<td>Evidence is collected from buyer and supplier side (multiple perspectives; multiple informants)</td>
</tr>
<tr>
<td></td>
<td>Establish chain of evidence</td>
<td>Data collection</td>
<td>Data triangulation is supported by documentary evidence; e.g. firm documents and government reports</td>
</tr>
<tr>
<td></td>
<td>Key informants review draft report</td>
<td>Composition</td>
<td>Original material (interview transcripts, documentary etc.) is referenced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Documents and transcripts are collected for verification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Case study description was sent to interviewees to verify the analysis</td>
</tr>
<tr>
<td><strong>Internal Validity</strong></td>
<td>Pattern-matching</td>
<td>Data analysis</td>
<td>See sub-section 3.7.1 Within-case analysis</td>
</tr>
<tr>
<td><strong>External Validity</strong></td>
<td>Use replication logic in multiple-case studies</td>
<td>Research design</td>
<td>Case studies rely on 'analytical generalisation' rather than 'statistical generalisation'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Case studies aim to generalise to some wider theory, rather than a population</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>Interview guide</td>
<td>Data collection</td>
<td>Guide contains the procedures and questions for the data collection phase</td>
</tr>
<tr>
<td></td>
<td>Case study database</td>
<td>Data collection</td>
<td>Creating a case study database during data collection including, for instance: interview transcripts, observation notes and case documentary</td>
</tr>
</tbody>
</table>

**Table 12**  Summary of research credibility

(adapted from Yin, 2003, p.34)

3.7 **Data Analysis and Interpretation**

Case study data was analysed at both within-case and cross-case levels and these are summarised in the following sub-sections. Figure 12 outlines the data analysis sequence adopted for this research. However, it is important to point out that the processes of data collection and data analysis are not considered a distinct separate phase but rather seen as interconnected and overlapping.
Miles and Huberman (1994) provide an invaluable general framework for conceptualising qualitative data analysis which is rooted in the philosophical standpoint of critical realism. Four steps - transcribing/documentation, coding/data reduction, summarising and displaying - are described under the following subheadings: within-case and cross-case analysis.

### 3.7.1 Within-case analysis

As described earlier, in preparing and conducting the research, a comprehensive interview guide was developed, following Bryman (2001) and Yin (2003). To overcome the main weaknesses commonly associated with qualitative research in general and interviewing in particular, interviews involved respondents from the buyer and supplier side to reduce potential respondent bias. The majority of interviews were recorded and transcribed, whilst the confidentiality of participating organisations and individuals was assured. The first step was the interview transcription. Interview recordings were transcribed verbatim (Crabtree and Miller, 1999) or thoroughly summarised. Transcripts were maintained as part of the case study database. Extensive notes were taken where interviews, in accordance with interviewees’ requests, were not tape recorded. Interview data was further collated with secondary data such as firm documents and government reports.
Secondary data sources deployed in this research included research reports published by: (i) UK government departments such as the National Audit Office (NAO) and H.M. Treasury, (ii) consultancy reports by Arthur Andersen and PriceWaterhouseCoopers, and (iii) reports published by the European Union on PPP issues. Table 13 outlines selected reports on Public Private Partnerships from 2000 to 2008. Further secondary documentation included press clippings, company web pages and company documentation such as internal project reports. Secondary data sources were then analysed deploying the data analysis software NVivo. The data was analysed using a subset of codes ranging from broad codes describing the case background to specific codes for the public-private relationship. Secondary data was then used to collate with primary data to strengthen and inform the findings and conclusions. For instance, interview data on performance indicators such as on time for the bidding/contract negotiation and build phase were collated with secondary data that reports the appropriate measures. Similarly, interview data on individual case backgrounds was enriched with secondary data taken from, for instance, press clippings and government reports.

For confidentiality reasons, the actual contracts governing the investigated relationships were not accessed. However, detailed descriptions of contractual governance by case interviewees from the buyer and supplier side was collated with secondary data describing contracts in Public Private Partnerships such as H.M. Treasury’s reports on standardised PFI contracts (H.M. Treasury, 2004 and 2007). These reports outline the various contract terms and clauses ranging from service availability to performance monitoring and price and payment mechanisms in the standard PFI contract version 3 and 4 which have been used for more recent PFI health infrastructure projects in the UK.
<table>
<thead>
<tr>
<th>Source</th>
<th>Year</th>
<th>Title</th>
<th>Brief description of content</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Stationery Office</td>
<td>2000</td>
<td>Public Private Partnerships: The government’s approach</td>
<td>Definition of PPP; value for money considerations; performance regimes; guidance for public sector to develop partnerships</td>
</tr>
<tr>
<td>The Audit Commission</td>
<td>2001</td>
<td>Building for the Future: The management procurement under the Private Finance Initiative</td>
<td>Introduction to PFI; guidance on specifying long-term service requirements; performance measurements; risks and value for money</td>
</tr>
<tr>
<td>Arthur Andersen and Enterprise LSE</td>
<td>2001</td>
<td>Value for money drivers in the Private Finance Initiative</td>
<td>Value for money considerations; survey of public sector project managers’ opinions</td>
</tr>
<tr>
<td>National Audit Office (NAO)</td>
<td>2001</td>
<td>Managing the relationship to secure a successful partnership in PFI projects</td>
<td>Review of partnership approaches including shared understanding of public and private partners’ objectives, establishing a contractual framework and value for money considerations</td>
</tr>
<tr>
<td>4Ps (Public Private Partnerships Programme)</td>
<td>2002</td>
<td>The final business case</td>
<td>Guidance on the final business case including project objectives, stakeholder consultation and procurement process and competition</td>
</tr>
<tr>
<td>Office of Government Commerce (OGC)</td>
<td>2002</td>
<td>Green Public Private Partnerships</td>
<td>Whole life-cycle costing; sustainability issues in PFI/PPP projects</td>
</tr>
<tr>
<td>European Commission – Directorate-General Regional Policy</td>
<td>2003</td>
<td>Guidelines for successful Public Private Partnerships</td>
<td>PPP structures; assessment of suitability and effectiveness of PPP projects across different sectors; legal and regulatory structures; financial and economic implications of PPP projects; PPP planning and implementation</td>
</tr>
<tr>
<td>H.M. Treasury</td>
<td>2004</td>
<td>Value for money assessment guidance</td>
<td>PPP background; explanation of tendering process; guidance on investment and project level assessment</td>
</tr>
<tr>
<td>International Financial Services London (IFSL)</td>
<td>2006</td>
<td>PFI in the UK: Update</td>
<td>Breakdown of PFI projects and contract value by government departments; progress report; review of operational performance of PFI projects</td>
</tr>
<tr>
<td>Partnerships UK</td>
<td>2007</td>
<td>PFI: The state of the market</td>
<td>Analysis of PFI market including project investors, lenders and contractors</td>
</tr>
<tr>
<td>Confederation of British Industry (CBI)</td>
<td>2007</td>
<td>Going global: The world of Public Private Partnerships</td>
<td>Drivers for success in PPPs; lessons learnt from PPP markets around the world</td>
</tr>
<tr>
<td>National Audit Office (NAO)</td>
<td>2007</td>
<td>Benchmarking and market testing the ongoing services component of PFI projects</td>
<td>Value for money considerations; review of benchmarking arrangements in PFI contracts</td>
</tr>
<tr>
<td>National Audit Office (NAO)</td>
<td>2008</td>
<td>Making changes in operational PFI projects</td>
<td>Value for money and risk considerations; relationship management guidance</td>
</tr>
</tbody>
</table>

Table 13  Selected reports on Public Private Partnerships from 2000 to 2008
The first step of the within-case analysis produced a case narrative (Voss et al., 2002). Further discussions with respondents were conducted in order to fill out gaps and prevent misunderstanding of particular issues and events. The full description of the individual case study was produced accompanied by a project timeline incorporating critical case events (Figure 13). Critical events that had a positive or negative impact on the relationship, occurring during the different PFI project phases – bid/contract negotiation, build and operate phases - were mapped along a timeline. These events are intended to provide an interpretative basis for discussion of the contractual and relational governance dynamics.

![Figure 13](Generic timeline of a PFI project including key events)

The second step of the within-case analysis includes the coding of key data obtained through interviewing, the respondent-driven critical incident technique, and firm documents and government reports for each of the themes of interest. Coding is employed as a means to reduce data into categories. Miles and Huberman (1994) define codes as “tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study” (p.56). In addition, Rubin and Rubin (1995) argue that the “coding process fragments the interviews into separate categories of themes, concepts, events, or stages” (p.251).

The applied codes are based on the literature review and are identified prior to the analysis to limit the number of categories (Voss et al., 2002), thus enabling the researcher to compare and analyse the data more effectively. Nevertheless, as illustrated in Figure 12, it is recognised that coding is an iterative process, uncovering further constructs when moving between theory and data (Robson, 2002; Glaser and Strauss, 1967). Coding proceeded in stages where first a few main coding categories were identified and later on further categories or sub-categories evolved. The purpose of coding is to gain a clear understanding of the different contexts.
embedded within the cases and to identify the main themes and/or variables. In order to improve and test coding reliability, the researcher recoded all interviews several weeks after the first coding. A high level (above 85 percent) of coding reliability was achieved which was within the norms of 80 to 90 percent (Miles and Huberman, 1994).

The data analysis process of coding was facilitated by the computer-based tool NVivo. Dainty et al. (2000) cite that computer-aided tools can enhance the data analysis through the assistance of data management and provide the facility to code and retrieve data. NVivo facilitated the coding process of interview transcripts and secondary data. However, Weaver and Atkinson (1994) argue that using computer-aided analysis tools may restrict the diversity of approaches to those readily used in the programme. Extensive training in the use of NVivo was proposed to counter this problem. Moreover, consistency and structure of the coding process was ensured throughout the analysis and the coding process was repeated several times to counteract possible coding discrepancies (Blismas and Dainty, 2003). Appendix D depicts NVivo screenshots illustrating examples of tree nodes and project folders deployed in the analysis.

Coding facilitated the population of the case timelines incorporating critical case events (Figure 14). Figure 14 depicts the dynamic interplay of contractual and relational governance over the three distinct project phases. Contractual (C) and relational (R) governance mechanisms are underlined by interviewees’ comments on critical events, as identified by interviewees, during the long-term relationship. The magnitudes (L – low; M – medium; H – high) of the critical events and their resulting impact on contractual and relational governance are mapped along the case timeline, resulting in an illustration of governance changes over time.
Figure 14: Dynamic interplay of contractual and relational governance

Figure 14 was subsequently simplified to display critical case events within each individual case study (Figure 15). Each individual event is also recognised by its unique event identifier. For example, event ‘relationship away-day’ during the operate phase in Figure 14 is recognised as A5 in Figure 15. Percentages in Figure 15 represent the significance of individual governance combinations (I, II and III) such as 14% for governance combination medium contractual governance and medium relational governance (I). Percentages marked with IV to VII represent individual governance percentages, for example, high contractual governance accounts for 86% among all identified cases (VII). Percentage marked with VIII shows the percentage of governance combinations which are characterised by a balanced governance combination, for instance, medium contractual and relational governance in event A5. Percentages as indicated in the tables and figures should not be seen as representing absolute percentages, but rather as indications of the significance of governance mechanisms and governance combinations. For instance, the majority of events were governed by high contractual governance as indicated by 86%. This percentage shows a tendency towards governing events with high emphasis on contractual governance.
Specific coding included contextual variables and the level of significance attached to the use of contractual (CTR) and relational (RELN) governance mechanisms. Measuring significance of use of contractual governance was based on any indication of documentary changes of explicit referral event, often with 3rd party legal support being involved. Given that a precise calibration of relational governance was problematic, a proxy measure rating the significance of inter-personal and inter-organisational relationships was used (Zheng et al., 2008). This was based on Zaheer et al.’s (1998) study of inter-organisational and inter-personal trust between firms’ boundary-spanning individuals. Coding items included dimensions such as reliability, credibility, fairness, goodwill and competence across individuals (Seppänen et al., 2007). For each critical event, an interpretative assessment was then produced of the relative magnitude of both mechanisms (using a simple 3-point scale: high, medium, low) and this was then plotted along the project timeline, providing an illustration of governance interplay over time.

The next step was to produce summary paragraphs for each construct which facilitated the subsequent step of within-case analysis. Matrices, charts and networks were the tools employed to organise and summarise the data in this thesis. The final step included the development of summary displays, or arrays, for each case which were constructed by the various summary paragraphs produced in the previous step.
In conclusion, the within-case analysis examined the differences and similarities of occurrences and observations from the different interviewees. Various analytical techniques, data displays, matrices and categorical schema were used to manage the data and provide insights. These techniques and procedures provide the gradual building of explanation and are commonly cited as needed for building an explanation about the case (Glaser and Strauss, 1967; Eisenhardt, 1989b; Yin, 2003); facilitating a conceptual coherence from the observations and information garnered from the interviews.

3.7.2 Cross-case analysis

Cross-case analysis only commences after the within-case analysis has been completed. The cross-case analysis is deployed to detect patterns in terms of commonalities and divergences across the various cases; hence pattern-matching is been employed to facilitate the cross-case analysis. Individual case summary displays were merged into a single display to facilitate cross-case analysis. Cross-case analysis provides a means of enhancing the validity of case findings (Eisenhardt, 1989b). In other words, the validity of findings can be enhanced if patterns can be matched across similar cases. Validity will be even stronger if contrasting pattern are found, but for predicted reasons.
3.8 Chapter Summary

This chapter has outlined the argument for the philosophical and methodological approach and strategy based on the research questions developed in this thesis. The chapter made a case for the philosophy of critical realism and explained the chosen case study strategy and responded to criticisms of this strategy. The chapter also described the chosen data collection techniques, namely semi-structured interviews and critical incident technique. The chapter concluded by explaining the criteria of research credibility and the research data analysis procedures for this research study. The following chapter summarises the findings from the study reflecting the methods that were described previously.
CHAPTER FOUR: CASE FINDINGS

Introduction to Chapter

This chapter presents the findings of the data collection phase of the thesis. Each case is introduced by a brief description of the case background and a graphic representation of the identified events. Further, identified critical events are presented along the project phases: bid/contract negotiation, build and operate, supported by interview quotes from buyer and supplier side. Seven critical events where identified for each individual case, except for the Oxford Hospital case were five critical events were determined. During the period of data collection the Oxford Hospital had just commenced the operate phase, thus one critical event was identified in the operate phase. The last sub-section of each case summarises the events and examines contractual governance, relational governance and governance interplay. Individual timelines for each case can be found in Appendix E.

The findings are presented in the order of the case studies in the healthcare, waste management and emergency services sector:

- 4.1 Swindon Hospital
- 4.2 Oxford Hospital
- 4.3 Kirklees Waste Management
- 4.4 Surrey Waste Management
- 4.5 Gloucestershire Fire and Rescue Service
- 4.6 South Wales Fire and Rescue Service

4.1 Swindon Hospital

The following sub-sections collate and analyse the findings for the Swindon Hospital case along the identified critical events.

4.1.1 Case background

Faced with a regional requirement to expand healthcare capacity in order to meet rising demand, a decision was made to replace a town centre hospital which was built in the late 1950s and centralise a number of other health facilities into one large hospital on a greenfield site outside the town. The planning process resulted in a
referral to the government level, as planning guidance was not in favour of the use of greenfield sites. However, due to the inherent complications of working within a congested existing town centre site, a greenfield site was chosen as the preferred hospital location. The new hospital was designed, built, financed and operated (DBFO) by a private company. The principal public–private arrangement is a long-term relationship between a single National Health Service (NHS) Trust and a private partner, a company that combines both a construction and a facilities management (FM) division. The contract covers a total of 30 years combined product (hospital building) and service (hard and soft FM) provision. The first 3 years covers the design and build phase of the hospital, a six-storey L-shaped building with 55,000 square metres of floor space and a total of more than 550 beds. The site also includes parking spaces for more than 1,000 cars. The second phase covers the service provision for a period of 27 years.

Although the initial bidding process was suspended during a general election in the late 1990s, it resumed after the election of a new government that confirmed its commitment to the policy. The PFI project was advertised in the Official Journal of the European Union (OJEU) in the mid 1990s and the bidding and contract negotiation process spanned 5 years. The hospital case was among the ‘first wave’ of PFI healthcare projects in the UK. In the 1990s the PFI supply market for delivering a hospital and adjacent services was relatively underdeveloped, hence only two companies bid for this project. The successful bidder was one of only a few companies in the PFI market with experience of designing, building, financing and operating a hospital. Moreover, the NHS Trust had limited understanding and, by definition as an early PFI project, almost no experience of PFI procurement processes. Figure 16 represents the identified critical case events across the three project phases for the Swindon Hospital case. Individual events are also recognised by their unique event identifier. For example, ‘gritting car park’ event during the operate phase in the Swindon Hospital case is recognised as A6.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Bid/Contract</th>
<th>Build</th>
<th>Operate</th>
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<tbody>
<tr>
<td><strong>Critical</strong></td>
<td>Tendering seminar</td>
<td>&gt;430 contract</td>
<td>Gritting car</td>
</tr>
<tr>
<td><strong>Events</strong></td>
<td>Site search and planning permission</td>
<td>changes</td>
<td>park</td>
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<tr>
<td><strong>Event</strong></td>
<td>A1</td>
<td>A3</td>
<td>A5</td>
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<tr>
<td><strong>Identifier</strong></td>
<td>A2</td>
<td>A4</td>
<td>A6</td>
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**Figure 16** Swindon Hospital events
### 4.1.2 Swindon Hospital project phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Event</th>
<th>Buyer’s Perspective</th>
<th>Supplier’s Perspective</th>
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<tbody>
<tr>
<td>Bid/contract</td>
<td>Tendering seminar</td>
<td>“[...] the seminar was useful, but as soon as you then issue preferred bidder, anything is possible but at a cost, and that is where culturally the relationship changes as well, because it goes from can do to might do.” (Trust Head of Estate)</td>
<td>“ [...] a meeting among friends.” (Director of Business Development)</td>
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<td></td>
<td>Site search and planning permission</td>
<td>“[...] an aggressive contract approach [...] and management style [...]” (NHS Trust Ex-FM Director)</td>
<td>“ [...] the scheme had to be renegotiated in terms of cost and affordability [...]” (Project Director)</td>
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<td>“ [...] incredibly confrontational [...]” (Trust Ex-Finance Director)</td>
<td>“ [...] That was a key moment because we then tried to redesign it, but [the Trust] could not afford it, every time we tried to redesign it was unaffordable. They admitted it at that point that they could not afford the project. So they were not working as partners with us, they were hoping that we would lower our price, which was impossible for us to do because it was such a big difference. I worked out for them that they could afford probably only half what the cost of the project was. And that gap could not be solved.” (Project Director)</td>
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<td>“So I think [the Trust] looked at 12 different sites as part of the option appraisal, and a green field site was selected [...] There were some planning concerns so it did not go through easily. It took a while and in fact from about 1996 to about 1999 there was lots of discussion [...]” (Trust Ex-FM Director)</td>
<td>“ [...] so here we are as a partnership, not communicating at all [...]” (Trust Ex-CEO)</td>
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<td>“ [...] so here we are as a partnership, not communicating at all [...]” (Trust Ex-CEO)</td>
<td>“ [...] we put in place a plan to make the project happen with the Trust, but it involved a fundamental review, including changing location. So we knew in 1996 that it would not be affordable without a very significant change. And we then realised that was a different site, and then we went into the activity of acquiring a site and getting planning permission.” (Project Director)</td>
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<td>Phase</td>
<td>Event</td>
<td>Buyer’s Perspective</td>
<td>Supplier’s Perspective</td>
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<tr>
<td>Build</td>
<td>A3 – &gt;430 contract changes</td>
<td>“[...] an aggressive, old-fashioned contractor man, who has taken the role that these people had to perform to the contract.” (Trust Head of Estate) “ [...] it has been a fair few post-contract variations and that’s probably because the specs were not robust or the way that people want to change.”; “We went through about 438 [contract variations], [...] the biggest one was for £24 million, which was the Treatment Centre, but the cheapest one was £238 which was a socket in the office [...]” (Trust Ex-FM Director). “ [...] if you wanted to build a new treatment centre or if you wanted to put a new door in the wall there, the procedure is exactly the same, so it has been quite unwieldy for smaller changes [...]” (Trust Ex-FM Director)</td>
<td>“Constant fight over pricing issues [...]” (Manager- build phase) “[...] there were so many contract variations necessary during the build phase. The Trust has to acknowledge that they did not get the output specification right.” (FM Director)</td>
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<td>A4 – Lift problem</td>
<td>“[...] just before we were opening we had problems with the lifts here and the problem was that [the private partner] bought cheap and they are now having to maintain expensively [...] we had some real issues about the availability and reliability.” (Trust Ex-FM Director) “We had an issue with the lift which seemed to us it took a long time to rectify. We had to get quite robust with them until they took it seriously. I think you need robust conversions sooner because otherwise people think you are weak.” (Trust CEO)</td>
<td>“[...] there were a few problems just before we opened the hospitals. But in all fairness, the data the Trust provided was not accurate and we needed to do a lot of reworking during this phase [...]” (FM Director)</td>
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<td>Phase</td>
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<td>Operate</td>
<td>A5 – Relationship away-day</td>
<td>“There was some cynicism on both sides about what the benefits of an away-day were […] deep down we do not really commit to it and we go away and get back in our contractual positions […]” (Trust Head of Estate)</td>
<td>“[…] the relationship away-day was useful to discuss relationship issues away from the office environment […]” (General Manager – SPV)</td>
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<td>“The relationship that needs to be the strongest is the one on the ground floor. I think that if the ward sister has a good relationship with the housekeeping team, the catering staff, the portering staff, if they have the relationship, then I think everything else will look after itself, because if it is working on a day-to-day level then it will work. I think that what has happened here is that that was not working so well. So what has happened is that it is gone into the more senior levels in an attempt to try and resolve that.” (Trust HR Director).</td>
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<td>A6 – Gritting car park</td>
<td>“[…] aggressive management style […] meetings and discussions were purely of contractual nature” (Trust Finance Director)</td>
<td>“A very aggressive approach [was] taken by the Trust, telling The Hospital Company [SPV] to tell its contractors to grit the car parks […]” (FM Director)</td>
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<td>“Read the contract fella, it does not say I have got to grit the car parks […]” (FM Director)</td>
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<td>A7 – Prepare for benchmarking</td>
<td>“[…] benchmarking will be an opportunity to get a more competitive price […]” (Trust Finance Director)</td>
<td>“[The private partner] is carefully examining how it does the work here to see whether it can make efficiencies savings. [The private partner] has to take a view on its margins etc. and come forward with a price that it hopes would be sufficiently attractive […]” (SPV General Manager).</td>
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<td>“[…] it does no harm to actually say we want to go out and do benchmarking. It is very important from a public and audit point of view to do benchmarking. Some people came to us and complaint about the quality of the cleaning. There is a public where we have to respond to. We are just testing the market […]” (Trust CEO)</td>
<td>“[…] it is also an opportunity for [the private partner] to put right any problems that were identified to the original bid.” (Commercial Director)</td>
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<td>“[…] we are not really looking to radically change the service in benchmarking or to try and change the quality of service radically, what we are trying to do is to get value for money […]” (Trust Head of Estate)</td>
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4.1.3 Contractual and relational governance analysis

This sub-section collates and analyses the case findings introduced above. As previously explained in the methodology chapter, a graphic representation of the significance of contractual and relational governance at different critical events over time was developed. Figure 17 depicts contractual governance, relational governance, governance combinations and critical case events for the Swindon Hospital case. Percentages as indicated in the tables and figures should not be seen as representing absolute percentages, but rather as indications of the significance of contractual governance, relational governance and their interplay. For instance, the majority of events (as represented by 86%, or six out of seven events) in the Swindon Hospital case were governed by high contractual governance. High contractual governance combines two possible governance combinations for this case which are high contractual governance combined with low relational governance (in 57% of the events) and high contractual governance in combination with medium relational governance (in 29% of the events).

![Swindon Hospital governance diagram](image)

**Figure 17** Swindon Hospital governance diagram

The majority of events were governed by high contractual governance combined with low relational governance as indicated by 86% of events with high contractual governance combined with 57% of events with low relational governance. Contractual governance was predominantly deployed to resolve relationship
problems. Early attempts to facilitate the formation of inter-personal relationships through the ‘tendering seminar’ (A1) did not build up a reservoir of relational governance to overcome the strong emphasis of contractual governance throughout the late bid/contract negotiation and subsequent build phase. Both parties referred to the contract to, for instance, incorporate the myriad of contract variations (A3) and to resolve operational problems (A4). The ‘relationship away-day’ (A5) event during the early operate phase facilitated the information flow at manager level, but did not transcend to personnel on an operational level. Recurring operational problems, such as the ‘gritting car park’ (A6) event, were resolved in lengthy meetings characterised by mutual blaming behaviour and resorting to the contract in order to resolve operational problems. In conclusion, this case is characterised by three different governance combinations with a high emphasis on contractual governance as indicated by six out of seven events governed by high contractual governance.

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<th>Combined Score</th>
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<th>Operate</th>
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Figure 18  Swindon Hospital combined score and range

In order to depict the governance trajectory for the Swindon hospital case, Figure 18 illustrates the combined score and range of contractual (CTR) and relational (RELN) governance across the relationship. The combined score is calculated by assigning scores to the significance scale of contractual and relational governance (1 to low, 2 to medium and 3 to high) and adding up the scores for both governance mechanisms. The range of governance mechanisms is calculated by the distance between both governance mechanisms illustrated on a spectrum ranging from -2 to 2. For instance, the governance combination contractual high and relational low results in a combined score of 4 and range 2. While the combined score of the governance combination shows the significance of both governance mechanisms during the relationship, the range depicts the exact governance combination across the
relationship. Figures 17 and 18 will provide a basis for discussion of the separate and combined dynamics of contractual and relational governance mechanisms for the Swindon Hospital case.

At the outset of the relationship, with limited inter-personal contacts between buyer and supplier, relational governance was of low significance. Faced with high levels of complexity and uncertainty, all parties put a great deal of emphasis on “getting the contract right” driving up the significance of contractual governance. The significance of contractual governance prevailed in the Swindon Hospital case. Six out of seven events are governed by a governance approach which combined high significance of contractual governance with low to medium significance of relational governance. Over time, relationships developed through accumulation of shared experience and, more pro-actively, through events such as the ‘relationship away-day’ (A5). The ‘relationship away-day’ (A5) event characterised the only event that resulted in a balanced approach of both governance mechanisms (range 0). As a result, contractual governance began to form a part of a more balanced governance approach, although as one interviewee noted, “I still want everything in the contract”. It is important to highlight, however, that the exchange had entered the operate phase by this point and in addition to the different parameters and priorities of this more service-oriented phase, the staff responsible for the relatively short-term bid/contract negotiation and design/build phases had moved on to other projects. Equally, as a ‘prepare for benchmarking’ (A7) event approached, the first point when, at least in theory, the FM sub-contractor could be replaced, it seems likely the ‘shadow of the future’ was clearer and this may have created an additional supplier incentive for collaboration. Observing the contractual and relational governance trajectories it is apparent that they do not follow simplistic, mirroring pattern, i.e. over time moving from high contractual and low relational to low contractual and high relational.

4.2 Oxford Hospital

The following sub-sections collate and analyse the findings for the Oxford Hospital case along the identified critical events.
4.2.1 Case background

Faced with the requirement to centralise and modernise healthcare services, an 18th century infirmary in the town centre had closed, and the majority of services were moved to a new hospital site. A shortfall in the standard of basic healthcare services, thus effecting the provision of patients’ healthcare, and existing financial constraints led the NHS Trust to assess the PFI procurement route. The PFI project led to the construction of a new hospital worth approximately £150m comprising a nine storey building providing accommodation for neuroscience, general and plastic surgery and adult services. An adjacent five storey building accommodates the children’s hospital and a paediatric assessment clinic. Moreover, the hospital offers patients and visitors facilities including coffee bars, shops, and a pharmacy. The hospital was designed to accommodate future flexibility, interchangeability and expansion adapting to changing requirements of healthcare provision.

The PFI project business case was initially advertised in early 2000s. The hospital was designed, built, financed and operated (DBFO) by a private company. The principal public–private arrangement is a long-term contractual relationship between a single National Health Service (NHS) Trust and a private partner, a company that combines both a construction and a facilities management (FM) division. The contract, which was signed in the mid 2000s, covers a total of 30 years, comprising a 3-year built phase and a 27-year operate phase. The private company delivers FM services including portering, catering and cleaning throughout the operate phase. This PFI hospital was built during the ‘second wave’ of healthcare PFI projects. The successful supplier was one of only a few companies in the PFI market with experience of designing, building, financing and operating a hospital. The NHS Trust had limited understanding and experience of PFI procurement processes. Figure 19 depicts the identified critical case events across the three project phases for the Oxford Hospital case.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Bid/Contract</th>
<th>Build</th>
<th>Operate</th>
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</thead>
<tbody>
<tr>
<td>Critical Events</td>
<td>Change of supplier team</td>
<td>Corridor solution</td>
<td>Team co-location</td>
</tr>
<tr>
<td>Event Identifier</td>
<td>B1</td>
<td>B2</td>
<td>B3</td>
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</table>

**Figure 19** Oxford Hospital events
### 4.2.2 Oxford Hospital project phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Event</th>
<th>Buyer’s Perspective</th>
<th>Supplier’s Perspective</th>
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<tbody>
<tr>
<td></td>
<td>B1 – Change of supplier team</td>
<td>“[...] we had our team in place [...] all team members stayed onboard and we managed the project with the same team throughout the project phases. [...] but the supplier team changed because of some internal restructuring and we needed to get familiar with new faces again [...]” (Trust Project Director)</td>
<td>“[...] the original members of the team that bid were not the ones that closed. The ones that closed the transaction are still there and actually running the deal now.” (Board Director of SPV)</td>
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<td>“[...] we realised the importance of having an experienced team, consisting of people that accompany the whole project.” (Construction Manager)</td>
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<td>“[...] the health sector is going to be significant for us; rather than patch together a team each time [...] let us be serious about it; have a fixed core of people who are called [Private Partner] Health who have got their own Managing Director and they are the ones that lead everything. So if the NHS Trust ever has a problem, they have got a permanent contact point [...]” (Construction Manager)</td>
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<td>B2 – Corridor solution</td>
<td>“[...] we [private and public partner] worked together to deliver an innovative solution for this project.” (Trust Project Director)</td>
<td>“[...] there was a lot of pre-financial close initiative with the link corridor [...] This long corridor connects the old to the new hospital and it is really big in use to control infection etc. [...] at the moment the link corridor offers one level for public, there is one level for clinical staff and there is one level for service providers.” (Hospital General Manager)</td>
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<td>“We [private and public partner] have talked about the project and the value of it and design features. [...] the hospital has been designed so that there can be future expansion as well [...]” (Programme Director)</td>
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<td></td>
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<td>“It was a very quick deal to close from start to finish [...] The Trust’s Project Director had such a strong hold on the project and she knew exactly what she was after and that helped the deal run as smoothly as it did. [...] and they had a very strong team on board here that really helped the project run well.” (Commercial Director)</td>
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<tr>
<td>Phase</td>
<td>Event</td>
<td>Buyer’s Perspective</td>
<td>Supplier’s Perspective</td>
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<tr>
<td>Build</td>
<td>B3 – Team colocation</td>
<td>“We could not get all of us in, but we had offices alongside. We were often working in their building. We had a couple of rooms at the end of their building and that meant that when there was a problem, we quite often could simply walk down a corridor and speak to someone and sort it out before it became something else.” (Trust Project Director)</td>
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<td>“I would just walk down a corridor and talk to someone, not ringing up or just suddenly sending a communiqué that says you are not meeting the contract.” (Trust Project Director)</td>
<td>“[…] we had the project office in which [the private partner] works, the builders, and then an office for SPV and [...] then you have the Trust project team sitting somewhere else. [...] we said we need to work closer together so the entire team moved closer together.” (Hospital General Manager)</td>
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<td>B4 – Contract renegotiation</td>
<td>“There were a few variations necessary [...] which needed to be reflected in the contract [...]” (Trust Project Manager)</td>
<td>“[...] we held joint risk workshops with the Trust’s representatives leading up to commencement of service delivery, so we could jointly assess with the Trust what the potential risks were [...] during the build phase, because we were doing interim services in the old part of the hospital [...] it gave us the opportunity to understand the risks that are associated with the service delivery, before starting the actual operate stage [...] this situation helped us during the contract renegotiation phase [...]” (Programme Director)</td>
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<td>“[...] we needed to reflect a few variations in the contract documents [...] which I think is very common, considering this hospital project worth over £100m.” (Trust Project Director)</td>
<td>“[...] under the PFI contract, once you have signed the deal for a given price, then that is what you have to do. You have to deliver it for that price so you cannot go back to the Trust and say we did not think it was going to be like this [...]” (Programme Director)</td>
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<td>“The Trust wanted to have a number of 30 odd variations to the hospital building 5-6 months before service commencement [...] we sat down with the Trust and the lawyers to accommodate that we could actually undertake these variations without it impacting on completion. Again it had to have willingness on both sides to make the thing work, otherwise we could have just said no you give me an extension of time or no we are not going to do this.” (Commercial Manager)</td>
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<tr>
<td>Phase</td>
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<td>Operate</td>
<td>B5 – Portering problems</td>
<td>“[…] we [the Trust] do not really understand why [the private partner] is not performing according to the contract […] there has been no information passed on to us [the Trust] […] and nobody from them [the private partner] came to us [the Trust] to resolve the portering problems […]” (Trust Project Manager)</td>
<td>“[…] we have recently been through a process of trying to renegotiate the performance management system for portering because it was really far too onerous in the original contract. […] unless we were working at 99.7% efficiency in our response times for every portering call, we would be breaching the thresholds for the failure points which is crazy. 99.7% anything that operates that efficiently you ought to be winning gold medals not getting failure points […]” (Programme Director)</td>
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<td>“[…] [the private company] is trying to make sense of the contract […] but all the measurements and requirements are clearly stated in the contract […]” (Trust Project Director)</td>
<td>“[…] when the contract was closed there was an assumption that there would be 4000 portering jobs a month. In the operational phase we exceeded this threshold, so what we have at the moment is the threshold are not aligned to the number of jobs.” (Hospital General Manager)</td>
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<td>“We found out that the porters were particularly busy and we did not fully understand why and we monitored […]. The reason is that they are doing work to meet new Trust policies that we have not been informed of […] Instead of using a nurse to accompany a patient to tests, the nurses used two porters […]” (FM Director)</td>
<td>“[…] the helpdesk was designed to take 9,000 calls a month and it is now taking 25,000 calls a months. And of course, we need extra staff and the Trust must acknowledge that volume of work. We are not responsible for it. We just get tasks.” (FM Director)</td>
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<td>“[…] the Trust has not informed us of changes to activities. We have to effectively find out for ourselves which I did not think is a very good arrangement. But we got various specialists to consider the service changes […].” (FM Director)</td>
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4.2.3 Contractual and relational governance analysis

Figure 20 depicts the governance combinations and critical case events for the Oxford Hospital case.

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<th>20%</th>
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<td>Relational governance</td>
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<td>L</td>
<td>60%</td>
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<td>Contractual governance</td>
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**Figure 20** Oxford Hospital governance diagram

The majority of events were governed by high contractual governance (80%) combined with low to medium significance of relational governance (60% and 40% respectively). Having gone through a lengthy bidding and contract negotiation phase, both parties in the Oxford Hospital case encouraged the establishment of inter-personal relationships during the build phase by co-locating their teams (B3). Contract renegotiations (B4) at the end of the build phase were typified by an increased information flow across the partnering organisations due to previously built up inter-personal relationships. However, both organisations deployed contractual governance at the outset of the operate phase when severe operational problems (B5) were encountered. Overall, both parties in this case deployed three different governance combinations with an emphasis on high contractual governance.

In order to analyse the governance trajectory for the Oxford Hospital case, Figure 21 illustrates the combined score and range of contractual and relational governance across the relationship. Figures 20 and 21 will provide a basis for discussion of the separate and combined dynamics of contractual and relational governance mechanisms for this case.
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<th>Combined Score</th>
<th>Bid/Contract</th>
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**Figure 21** Oxford Hospital combined score and range

The investigated events at the Oxford Hospital case indicate that contractual governance was mostly of high significance throughout the relationship. However, differences are apparent in the significance of relational governance along the relationship. Whilst the bid/contract negotiation phase was characterised by low levels of relational governance, both parties actively encouraged information sharing during the subsequent build phase. Limited inter-personal contacts and the change of the supplier team (B1) in the early project phases emphasised the significance of contractual governance. However, interviewees from the buyer and supplier side reported that in order to stimulate information exchange and problem solving capabilities, both teams decided to relocate into a joint building near the construction site (B3), thus leading to an increase in relational governance during the build phase. Frequent information sharing and the formation of inter-personal relationships led to contract renegotiation (B4) at the end of the build phase which was typified by open communication among both parties. However, severe operational problems (B5) during the early months of the operate phase could only be resolved by emphasising contractual governance combined with low relational governance significance. Both parties re-emphasised the contractually stipulated problem solution procedures, engaging in lengthy discussions in which both parties resorted to the contract to resolve relationship problems.
4.3 Kirklees Waste Management

The following sub-sections collate and analyse the findings for the Kirklees Waste Management case along the identified critical events.

4.3.1 Case background

Kirklees Metropolitan Council faced a deteriorating solid waste management situation, a rapidly diminishing landfill capacity and the prospect of strengthened environmental legislation and increase in the cost of landfill in the 1990s. As a Unitary Authority, the Council is both the Waste Collection Authority (WCA), responsible for collecting household rubbish from all homes in its area, and the Waste Disposal Authority (WDA), responsible for disposing household waste that it has collected. The Council provides civic amenity sites and other services to businesses and residents and contributes to the achievement of national targets contained in the National Waste Strategy.

The waste management and other cleaning services consist of three principal elements: (i) refuse collection, including collection of grey and green bins from households, bulky and garden waste collection, and trade refuse collection; (ii) integrated waste disposal, comprising various plants, waste transfer stations and recycling centres delivered through the PFI contract, and (iii) other cleaning services, consist of, for instance: sweeping roads and footways, emptying litter bins and market cleansing. Integrated waste management includes waste minimisation, re-use, recycling, composting, recovery and disposal. The Council produces 250,000+ tonnes of waste for disposal annually, of which 75% is household rubbish.

The contract to manage refuse collection and other cleaning was awarded to the in-house team in the mid 1990s, and waste disposal is managed through a 25 year PFI contract with a private sector supplier. The need for a PFI solution was pronounced by new government recycling targets and the factor that long-term landfill capacity is in short supply within the Council area. In the mid 1990s, the Council launched a comprehensive review, including extensive consultation with private sector companies, to identify the Council’s preferred long-term waste management strategy. Over twenty private companies participated in this exercise. The review included
predicting the point at which alternative treatment methods would become cheaper than the landfill tax which was expected to rise.

A key consideration for selecting the PFI method was lower life cycle costs in comparison to alternative procurement methods. Part of the initial research process was undertaking a detailed options appraisal in order to reach the council’s preferred option before publishing a tender in the OJEU (Official Journal of the European Union). The tender attracted ten different bids from five waste management companies. A 25 year PFI contract worth £30+m was signed in the late 1990s. Over the first few years of the contract, the private company constructed various waste facilities such as a waste-to-energy plant, a multi-materials recycling centre and a new transfer loading station. The contract covered the management for disposal of all municipal solid waste in the Council area, including the management of waste facilities throughout the county. This case was among the initial PFI projects in the waste sector, thus the local authority had limited experience of PFI procurement processes.

Figure 22 depicts the identified critical case events across the three project phases for the Kirklees Waste Management case.

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<td>Output specification work</td>
<td>Contract negotiation</td>
<td>Regular meetings</td>
</tr>
<tr>
<td>Event Identifier</td>
<td>C1</td>
<td>C2</td>
<td>C3</td>
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**Figure 22** Kirklees Waste Management events
### 4.3.2 Kirklees Waste Management project phases

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<thead>
<tr>
<th>Phase</th>
<th>Event</th>
<th>Buyer’s Perspective</th>
<th>Supplier’s Perspective</th>
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<tbody>
<tr>
<td>C1</td>
<td>Output specification work</td>
<td>“ [...] it was all about the output specification […] getting it right and considering all the constraints […] we spent a lot of time with legal people in the room […]” (Council’s Project Manager)</td>
<td>“It was important to get everyone around the table and to start negotiating issues related to the output specification […]” (early Project Manager)</td>
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<td>“[…] a regular series of meetings were held with most of the potential bidders to finalise the project proposal” (Council’s Assistant Contract Manager)</td>
<td>“[…] a strong working relationship between partners is essential and both parties must believe in the project and in their ability to deliver it on time and budget […] and to resolve relationship difficulties.” (First Managing Director)</td>
</tr>
<tr>
<td>C2</td>
<td>Contract negotiation</td>
<td>“[…] refine the documentation including the development of options and to finalise the contract documentation” (Council’s Group Finance Manager). The contract sets out to divert 60% of waste away from landfill by the year 2002; to secure a long-term cost effective waste disposal price; to secure long-term waste disposal facilities; the retention of the maximum number of jobs and a long-term strategic role in waste management and maximum returns from assets.” (Council’s Contract Manager). “[…] it was vital for us to apply TUPE regulations to the existing employees and [that] over the first four years of the contract, it is anticipated that a further 30+ new jobs will be created […] [the private partner] was mostly very attentive to our needs and concerns during the contract negotiation phase, but still very commercial minded.” (Council’s Assistant Contract Manager)</td>
<td>“[…] all end disposals, all transport requirements, all transfer requirements, all recycling requirements and all requirements relating to the management and operation of Civic Amenity Sites needed to be addressed.” (current Contract Manager). “[…] we have a strong shared commitment to landfill reduction throughout our partnership […] which was also important to emphasise during the negotiations […]” (first Managing Director). “[…] the contract negotiation phase was also vital to get to know your partner and all the individuals involved in this project […]” (early Project Manager)</td>
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<tr>
<th>Phase</th>
<th>Event</th>
<th>Buyer’s Perspective</th>
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| Build | C3 – Regular meetings | “[…] the team consisted of five senior officers who possessed all the key skill areas; financial, legal and technical, and was sufficiently small to take speedy decisions as required within an agreed delegated timeframe.” (Council Project Manager) 
“[…] external support on legal issues was required and […] external advisers needed to be managed to ensure effective use and to avoid cost escalation.” (Council’s Assistant Contract Manager) 
“[…] regular meeting among senior and operational personnel helped to keep the relationship on track […] and meetings helped to resolve some minor hiccups during the early phases.” (Council Contract Manager) 
“[…] it was crucial that a small project team with complementary skills is developed at a very early stage and that the team has the power to take decisions. Membership of the team must be consistent.” (Council’s Project Manager) | “We set up a review group which consists of the Council’s project team and senior personnel from the private partner, e.g. Chief Executive, Chairman European Director, Business Development Manager, Finance Director and Technical Director to review progress on a regular basis […].” (early Project Manager) 
“[…] regular operational meetings […] to improve communication between service managers and front line staff, to raise morale and to ensure that staff understand their contribution to service aims.” (early Project Manager) 
“[…] a new Energy from Waste (E/W) plant was procured as part of the PFI contract and was designed to meet the most stringent standards in Europe, in particular with reference to emissions from the chimney. Some people have concerns, particularly about dioxin emissions, but this plant complies with the very latest European standards and the government. We regularly met with the Council team to discuss ‘public buy-in strategies’ […]” (first MD) |
| Build | C4 – Contract renegotiation | “[…] contract variations were necessary during the build phase […] but I think this is very common in early project phases […]” (Council’s Contractor Manager) 
“[…] the Household Waste sites are operating on a high level. The sites do offer users a good range of recycling opportunities, although traffic management could be improved at some sites […] we addressed this issue and took it into account during the next contract renegotiations […]” (Council’s Assistant Service Manager) | “[…] address recycling targets as stipulated by the contract to reflect the current waste management situation […]” (Private Partner current Contract Manager) 
“We [the private partner] also looked at the opportunity to develop third party revenues by expanding the availability of the disposal facilities and this had to be reflected in the contract.” (first MD) |
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<td>C5 –</td>
<td>Visitor and education centre</td>
<td>“It is important to reinforce the message that recycling is a convenient and responsible option. Information needs to be provided on a regular basis, in a variety of ways and, where possible, relevant to local circumstances to promote ownership of the issue and to encourage a more responsible and environmentally friendly attitude.” (Council Project Manager). “[...] ongoing, positive relationship was vital to establish a joint project, the visitor and education centre, for members of the public, educational establishments, businesses and organisations to visit [and] gain knowledge on waste management related issues [...]” (Council Contract Manager).</td>
<td>“Waste has a significant environmental impact, but for some people it is an ‘out of sight out of mind’ issue. Once they have put their rubbish in the bin it is forgotten. However, there is a slowly growing awareness that when something is thrown away it does not disappear. [...] The centre will help to educate people about waste management [...]” (current Contract Manager). “[...] increased awareness has to be the first state in reducing waste and expanding the current use of recycling and other recovery of value schemes.” (current Contract Manager).</td>
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<tr>
<td>C6 –</td>
<td>Change of landfill regulations</td>
<td>“[...] the change of the landfill regulations did have a huge financial and technological impact on the existing PFI contract [...] we had to renegotiate terms and conditions regarding recycling [...]” (Council Contract Manager). “[...] we have met and even exceeded all previous Government targets regarding landfill diversion [...] but now we have to sit down again as partners [...] and we would not like to penalise [the private partner] for missing the targets [...]” (Council’s Contract Manager).</td>
<td>“[...] when the partnership was being debated, Government guidance allowed the bottom ash and metals recovered from Energy from Waste plants to be recycled, which would contribute towards government recycling targets. [...] then the landfill regulations changed which had an impact on the project [...] and changes needed to be reflect in the contract.” (current Contract Manager) “[...] the changed landfill regulations could have a devastating impact on the ongoing relationship [...] our strong relationship with the council helped to overcome this issue [...] and we worked as partners [...]” (Contract Manager).</td>
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<tr>
<td>C7 –</td>
<td>Acquiring additional land</td>
<td>“[...] successful early project stages [...] we worked closely with [the private partner] which helped strengthening the relationship [...] it is now important to develop a mutually agreed action plan including the acquisition of additional land, which is vital to ensure the successful future of the project.” (Council Project Manager). “[...] some initial frustrations have been experienced with the acquisition of land in North Kirklees, but this is now in hand and a development brief is being prepared.” (Council’s Contract Manager)</td>
<td>“[...] the location of the proposed facility needed not only to ensure that waste is handled in close proximity to the point of origin, but also that there will be no disruption to, or additional cost on, existing collection services for the Council.” (current Contract Manager) “[...] good communication systems and close liaison have been established between key personnel of the council and us.” (current Contract Manager).</td>
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4.3.3 Contractual and relational governance analysis

Figure 23 depicts the governance combinations and critical case events for the Kirklees Waste Management case.

![Governance Diagram]

This case reflects a more balanced governance interplay approach, combining contractual and relational governance throughout the relationship. The early project phase was governed by high contractual governance and less emphasis on relational governance (C1 and C2). Over time both parties observed and tested the commitment to this long-term relationship, building up inter-personal relationships through ‘regular meetings’ (C3) and mutual investments such as the ‘visitor and education centre’ (C5). Relationship problems, such as the ‘change of landfill regulations’ (C6), were resolved using a balanced governance approach (high/high). Overall, both parties in this case deployed five different governance combinations with an emphasis on contractual governance during the early phases and a more balanced approach (medium/medium; high/high) at later phases.

In order to analyse the governance trajectory for the Kirklees Waste Management case, Figure 24 illustrates the combined score and range of contractual and relational governance across the relationship. Figures 23 and 24 will provide a basis for discussion of the separate and combined dynamics of contractual and relational governance mechanisms for this investigated case.
Faced with a high level of complexity and uncertainty, the bid/contract negotiation phase was characterised by a high emphasis on contractual governance. Buyer and supplier organisations invested a significant amount of time to ensure a high degree of contractual completeness (C1 and C2). Both parties emphasised the importance of regular meetings (C3) during the early build phase as a means of increasing information sharing across the partnering organisations and to ‘create a more trusting work environment’. Over time, relationships developed through accumulation of shared experience and through proactive attempts such as ‘regular meetings’ (C3). The majority of buyer and supplier team members stayed on in this project, leading to inter-personal relationships typified by a high level of trust and frequent communication. Buyer and supplier organisations worked together to deliver a ‘visitor and education centre’ (C5) resulting in an increase of relational governance and a decrease of contractual governance significance. Further relationship events such as ‘change of landfill regulations’ (C6) and ‘acquiring additional land’ (C7) were governed by a balanced approach (high/high) and a pronounced emphasis on the importance of relational governance. Contractual governance was used to clarify responsibilities and to reflect the relationship development, rather than to punish non-confirmative behaviour through penalties or legal threats.

**Figure 24** Kirklees Waste Management combined score and range

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**Table: Combined Score and Range**

**Figure 24** Kirklees Waste Management combined score and range
4.4 Surrey Waste Management

The following sub-sections collate and analyse the findings for the Surrey Waste Management case along the identified critical events.

4.4.1 Case background

Surrey County Council is one of the largest and most densely populated counties in the South East Region of the UK. It comprises eleven districts and boroughs and has a population of over 1 million living in over 450,000 properties. The Council’s residents create more household waste per head of population than the national average, and this figure has grown steadily in recent decades totalling more than 600,000 tonnes in 2006/07. In the 1990s, the Council faced a rapidly diminishing landfill capacity and the prospect of strengthened environmental legislation and increasing costs of landfill.

A major driver for PFI projects in the UK waste sector is the EU Landfill Directive mandating that the proportion of UK waste send to landfill must be 75% of its 1995 volumes by 2010, reducing to 50% in 2013 and 35% in 2016 respectively. A number of legislative pressures also pushed towards radical changes and these included, for instance: national targets for the recovery of energy from waste, the landfill directive limiting the amount of biodegradable municipal waste that can be send to landfill, potential rises of the landfill tax rate and government policy on waste minimisation. However, the Council’s municipal waste, generated predominantly by its households, is growing by around 3% a year, potentially creating a future waste problem.

An overarching waste policy was implemented to guide and inform the two distinctive statutory roles of the County Council as a Waste Planning Authority (WPA) and a Waste Disposal Authority (WDA). The WPA has responsibility for identifying sites which are capable of managing over 3.5 million tonnes per annum of industrial and municipal waste arising in the county, whilst the WDA is responsible for managing the minimisation, recycling/composting, residual treatment and disposal of Municipal Solid Waste only. The eleven boroughs and districts act as WCAs, responsible for collecting municipal refuse, recyclable and compostable waste. Most waste disposal authorities in England are also responsible for a small
A proportion of industrial waste, collected by or on behalf of the waste collection authorities. Nationally non-household waste makes up 12% of reported annual municipal waste.

The County Council, acting as the WDA, published the PFI project in the OJEU in the late 1990s. A 25 year PFI contract with a private sector supplier worth £100+ m was signed two years later. The contract covers the management for disposal of all municipal solid waste in the Council area, including the management of refuse transfer stations and civic amenity sites throughout the county. Similar to the Kirklees Waste Management case, various new waste facilities needed to be constructed by the private company over the first few years of the contract. The contract also set out the construction of a new Energy from Waste (EfW) recovery plant to dispose of part of the residual waste that could not be recycled, composted or otherwise reclaimed from the waste stream. The UK division of the private partner, an international multi-services group, was established in the late 1980s and deals predominately with the collection, recycling, treatment and disposal of waste for both public and private customers. The private partner was previously awarded two long-term PFI waste management contracts in England.

Figure 25 depicts the identified critical case events across the three project phases for the Surrey Waste Management case.

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**Figure 25** Surrey Waste Management events
### 4.4.2 Surrey Waste Management project phases

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<th>Phase</th>
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<th>Buyer’s Perspective</th>
<th>Supplier’s Perspective</th>
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</table>
| Bid/contract negotiation | D1 – Contract negotiation | “We had some hard-nosed contract negotiations in the beginning of the project [...] they wanted to make money out of the project, but we did not have any money to spare.” (Council’s Project Manager)  
“[...] the contract alone included 150 pages of waste term definitions. When should I ever find time to read these? [...] the contract is highly impracticable to use [...]” (Council’s Finance Manager)  
“[...] the contract included 44 schedules across 450+ pages [...] including 150 pages of definitions [...]” (Council’s Ex-Contract Manager)  
“[...] the contract is the crucial instrument in the operate stage to manage [the private partner’s] performance, e.g. sites and vehicles are clean [...] we got 7 different performance categories with different amounts of penalties from £200 to £3000 [...] e.g. under the health and safety regulations, site people caught smoking, we penalise [the private partner] with a £1000 fine [...]” (Council’s Ex-Contract Manager) | “The output specification is arguably the most important document in procuring a project through PFI. It is the basis through which the local authority defines the service and outputs that it requires from us for the term of the project. The output specification was not well developed and it seems to me that they [the Council] did not really understand the contract terms and their implications [...] which consequently resulted in problems during both the build and service delivery phases of the project [...]” (General Manager)  
“[...] we [the private partner] had to estimate future waste arisings based on past waste information, incorporating future recycling targets and waste composition [...] there are different waste bands included in the contract resulting in different charges [...] and the Council has to guarantee a minimum amount of annual waste [...] which took us a long while to negotiate [...]” (Environmental and Technical Director) |
| D2 – Regular meetings | “[...] we went through some tough contract negotiations. We both realised that regular meetings were necessary early on to discuss the future direction of our partnership [...]” (Council’s Project Manager)  
“[...] our contract negotiations were later on also couched in regular informal meetings where both sides’ expectations and objectives were discussed and we both agreed to work flexibly towards improvements.” (Council’s Ex-Contract Manager)  
“Council officers worked closely with [the private partner’s] managers to deliver improvements in services though regular joint liaison meetings. This open style decision making helped to build consensus among personnel and strengthen confidence that services are being delivered.” (Council’s Project Manager) | “[...] meetings were crucial to identify shared objectives and formulate strategies and policies, raising the profile of waste issues at the relevant level and across professional disciplines within the council, developing agreed communication and information strategies and policies across both organisations.” (General Manager) |
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<th>Phase</th>
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<tr>
<td>Build</td>
<td>D3 – Public team change</td>
<td>“[... ] the operate phase did not start off very well and we suffered immense knowledge drain as half of the project team left during the early phases.” (Council’s Project Manager) “[... ] we were working on an adversarial relationship basis [...] they [the private partner] had a larger team and more resources while we were working with a team of only six [...]” (Council’s Finance Manager) “[... ] there was a lot of finger pointing and lengthy discussions about who was ultimately responsible for the ongoing problems [...]” (Council’s Ex-Contract Manager) “[The private partner] was only partnering for partnering sake [...] there was no effective communication between us and them [...]. Partnership? I do not know what this really means.” (Council’s Finance Manager)</td>
<td>“Half of the Council’s project team including project director and finance officer left the project team soon after the contract was signed [... ]” (General Manager) “We did not really have clear reporting and communications lines in the early operate phase as team members kept on leaving the project. [...] a replacement for the Council’s Contract Manager was not in place for over six months into the operate phase and no close relationships could be established as we did not know who would next leave the project.” (General Manager) “[... ] I think the council did not do its homework. Moreover, there was not any good communication with the end users of the contracted services and we noticed many perception gaps.” (Environmental and Technical Director)</td>
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<tr>
<td>Build</td>
<td>D4 – Missing planning permission</td>
<td>“[... ] the process of obtaining approval for new incinerators takes a long time [...] seven years on average, and was problematic due to significant public opposition.” (Council’s Ex-Contract Manager) “Now, of course, the project slowed down and we have to revise our project timetable because [the private partner] failed to obtain the planning permissions” (Council’s Project Manager). “[... ] we wished they [the private partner] would have communicated problems earlier. We felt left in the dark. There was no proper information sharing.” (Council’s Finance Manager) “[The private partner] now realises that public participation is necessary to obtain planning permissions. They have to understand that participation can only be achieved through a sustained programme of public education at all levels, and if the public can be confident of the necessity of the approach and that it represents Best Value. [...] now, we both realise that we have to work together to make this project a success.” (Council’s Project Manager).</td>
<td>“[... ] waste treatment facilities should in theory be built with larger capacities in order to also treat some non-municipal waste. However there are significant uncertainties in predicting the extent to which we will want to use such facilities and whether the Council can guarantee the delivery of tonnages over sufficient periods [...] having failed to obtain planning permission [...] we need to sit together with the Council team and work out a solution [... ]” (Environmental and Technical Director) “[... ] in hindsight, both partners should have jointly considered site identification and acquisition at an earlier stage of the project. And obviously, we both have not built in significant contingency in terms of time and cost for potential problems with the planning application [...] I guess we both were sure that we would not be turned down with our planning permission.” (Environmental and Technical Director)</td>
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<td>D5</td>
<td>Missed recycling targets</td>
<td>&quot;[...] Our combined recycling and composting rate was just over 20% which ranked us 29th out of 34 councils. This obviously falls short of the 30% government performance target [...]” (Council’s Former Planning Manager)</td>
<td>&quot;[...] we had no regular briefings or communication with the Council’s project officers [...] and they were using terminology which does not have an agreed meaning [...] they ignored the ‘bigger picture’ within which the partnership objectives operate [...]” (General Manager)</td>
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<td>&quot; [...] Department for Environment, Food and Rural Affairs [DEFRA] told us that we have to demonstrate that things can be turned around or there is a possibility of funding being pulled out of the project [...]” (Council’s Project Manager)</td>
<td>&quot;[...] in all fairness [...] they did not receive any proper contract management training [...] they always referred back to their lawyers [...] hindering the implementation of timely solutions [...]” (General Manager)</td>
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<td>&quot;[…] we had to renegotiate parts of the contract terms after missing the recycling targets.” (Council’s Project Manager)</td>
<td>&quot;[…] we worked together with the Council team to find a site.” (General Manager)</td>
</tr>
<tr>
<td>D6</td>
<td>Site search</td>
<td>&quot;[The private partner] had great difficulty securing planning permission for proposed incinerators and to find an appropriate site [...]” (Council’s Project Manager)</td>
<td>&quot;[...] there was no quick fix solution apparent [...] We had to find appropriate sites for the incineration plants to be able to achieve future Government targets.” (General Manager)</td>
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<tr>
<td></td>
<td></td>
<td>&quot;We were looking into 13 different possible new sites for a waste management facility. Six of those sites are acceptable for thermal treatment and incineration. However, we are keeping the issue of what we build separate from where we build it, and once our residents have told us the sites they want to see us use we will be consulting on what facilities will be built.” (Council’s Project Manager)</td>
<td>&quot;[...] we worked together with the Council team to find a site.” (General Manager)</td>
</tr>
<tr>
<td>D7</td>
<td>New treatment option appraisal</td>
<td>&quot; [...] we [the Council] had to realistically approach the contract and [...] say what we could effort in terms of a new treatment plant [...]” (Council’s Finance Manager)</td>
<td>&quot;We have to work together to submit a successful application for a new Energy from Waste plant.” (Acting General Manager)</td>
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<td></td>
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<td>&quot; [...] a series of meetings at senior level were held to discuss possible treatment options and jointly arrive at an appropriate action plan [...] they [private partner] were very knowledgeable about the different treatment technologies and we had some very productive meetings [...]” (Council’s Project Manager)</td>
<td>&quot;[...] if this project achieves a 60% recycling rate it would be doing extremely well given that the council has a mixture of rural and urban areas and differing participation rates [...] I am not sure if the Council is realistic about the project goals and what the project can really achieve [...]” (Environmental and Technical Director)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;We are moving towards a more partnership-like relationship and [the private partner] and the Council jointly worked together to find a solution that is environmentally sustainable and cost effective for dealing with waste that cannot sensible be recycled.” (Council’s Project Manager)</td>
<td>&quot;[...] we are now working together with the Council to turn around the project.” (Environmental and Technical Director)</td>
</tr>
</tbody>
</table>
4.4.3 Contractual and relational governance analysis

Figure 26 depicts the governance combinations and critical case events for the Surrey Waste Management case.

<table>
<thead>
<tr>
<th>Relational governance</th>
<th>14%</th>
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<tr>
<td>H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>D2</td>
<td>D7</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>29%</td>
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<tr>
<td>L</td>
<td>D3</td>
<td>D1</td>
</tr>
<tr>
<td></td>
<td>14%</td>
<td>71%</td>
</tr>
<tr>
<td>L</td>
<td>M</td>
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</tbody>
</table>

Contractual governance

Figure 26  Surrey Waste Management governance diagram

The majority of events were governed by high contractual governance (86%) combined with low relational governance (71%). Following a lengthy contract negotiation process (D1), the early build phase was characterised by a complete break-down of inter-personal relationships after the public organisation changed its team (D3). Both parties relied predominantly on contractual governance to resolve subsequent operational problems during the build and operate phase. No attempts were undertaken to actively build up a trusting inter-personal relationship among the partnering organisations until external pressure was exercised to turn around the project. The new treatment option appraisal (D7) was the first active attempt by both organisations to work together to achieve a better performing project. Regular meetings and joint working groups were installed to overcome previously encountered relationship difficulties. Overall, the relationship was governed by three different governance combinations with an emphasis on high contractual governance throughout the project.
In order to analyse the governance trajectory for the Surrey Waste Management case, Figure 27 illustrates the combined score and range of contractual and relational governance across the relationship. Figures 26 and 27 provide a basis for discussion of the separate and combined dynamics of contractual and relational governance mechanisms for this case.

<table>
<thead>
<tr>
<th>Combined Score</th>
<th>Bid/Contract</th>
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<th>Operate</th>
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<table>
<thead>
<tr>
<th>Range</th>
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<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>D6</th>
<th>D7</th>
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<tr>
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<tr>
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<td></td>
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<tr>
<td>RELN CTR</td>
<td></td>
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</tbody>
</table>

Figure 27 Surrey Waste Management combined score and range

The importance of contractual governance was emphasised throughout all project phases. The majority of events (six out of seven) were characterised by high significance of contractual governance. At the outset of the relationship, a lengthy contract negotiation process (D1) was necessary to achieve a high level of contract completeness. During the later stages of the bid/contract negotiation phase both parties recognised the importance of regular meetings (D2) to establish a more collaborative relationship. However, at the outset of the build phase, the public team was replaced (D3), rendering previously built up inter-personal relationships effectively redundant. The missing inter-personal relationships combined with severe operational problems during the build and operate phase led to a high emphasis on contractual governance combined with low significance of relational governance. Operational problems such as ‘missing planning permission’ (D4) and ‘missed recycling targets’ (D5) led to costly and lengthy contract renegotiations. The build and operate phases were typified by a low level of information sharing and problem solving. Both parties interpreted the contract in its strictest legal form, applying legal clauses, leading to mutual blaming and shirking.

Due to the failure to establish a relationship characterised by information exchange and mutual problem solving during the early phases, various project milestones such as contractually stipulated recycling targets (D5) were not reached. Moreover, the
project faced significant time and cost overruns during the build and operate phase. Both parties realised that relationships typified by shared information and problem solving needed to be established to overcome previous project difficulties. A ‘new waste treatment option appraisal’ (D7) was jointly developed, deploying a more balanced governance approach (high/medium).

4.5 Gloucestershire Fire and Rescue Service

The following sub-sections collate and analyse the findings for the Gloucestershire Fire and Rescue Service case along the identified critical events.

4.5.1 Case background

H.M. Treasury decided to extend the scope of PFI projects in the mid 1990s, moving away from financing solely highway and healthcare projects to involve police and fire services. A number of operational incidents throughout the country where fire fighters lost their lives occurred during the mid 1990s, and consequently the Health and Safety Executive (HSE) questioned the adequate delivery of fire fighter training by the individual Fire Services. Central government subsequently urged all emergency services and their local government overseers to invest in high quality training. However, most Fire and Rescue Service authorities could not provide practical training, as funding was not sufficient to build facilities required to practise realistic fire scenarios. In addition, Home Office issued a circular to all Fire and Rescue Services addressing the principles of operational training and urging fire authorities to invest significantly into high quality training.

The Gloucestershire Fire and Rescue Service case was a joint initiative between three regional emergency services providers seeking to achieve economies of scale from a shared training facility. The three fire authorities published the PFI project advert in the OJEU in the late 1990s. Early on, a number of firms expressed interest in the project and, as a result, the public partner ran a workshop and presentation day to help manage the pre-bidding phase. These workshops were supported by legal and financial advisors. Eventually, six firms submitted formal tenders and one was selected as the preferred bidder. The Fire and Rescue Training Centre represents the private partner's, with roots in the shipbuilding sector, first project in the PFI market.
This case was also among the first PFI projects in the emergency services sector, thus the fire brigades had limited experience of PFI procurement processes.

The principle public–private arrangement was a long-term relationship for the design, build and finance of a new training facility and its subsequent operation including the delivery of training services between these three public clients and a private partner. The contract for this design, build, finance and operate (DBFO) PFI project was signed in the early 2000s. Design and build work was sub-contracted to a construction company while the long-term FM service provision was sub-contracted to the private partner’s own business division.

The Fire and Rescue Training Centre includes a state-of-the-art £15+m training facility offering realistic fire training scenarios and accommodation facilities. The facilities provide realistic fire training scenarios within a risk assessed and managed environment. The training is accompanied by seminars, various in-house training and team building events. The Fire and Rescue Training Centre opened in early 2003, seven years after the identification of a need for a training facility by the three partnering Fire Authorities.

Figure 28 depicts the identified critical case events across the three project phases for the Gloucestershire Fire and Rescue Service case.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Bid/Contract</th>
<th>Build</th>
<th>Operate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Events</td>
<td>Site search (2 years)</td>
<td>Contract negotiation</td>
<td>Supplier team change</td>
</tr>
<tr>
<td>Event Identifier</td>
<td>E1</td>
<td>E2</td>
<td>E3</td>
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</table>

**Figure 28** Gloucestershire Fire and Rescue Service events
### 4.5.2 Gloucestershire Fire and Rescue Service project phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Event</th>
<th>Buyer’s Perspective</th>
<th>Supplier’s Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1 –  Site search (2 years)</td>
<td>&quot;[...] they [the private partner] took all the risks, all the investments and so on and they are getting nothing back until of course we [the Fire Authorities] start to occupy our training centre on day one [...]” (Project Manager)</td>
<td>&quot;[...] we [the private partner] invested quite a lot of time and resources to make this project happen. [...] it was important to understand our partner’s needs for this training centre [...]” (Centre Manager)</td>
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<tr>
<td>E2 –  Contract negotiations</td>
<td>&quot;[...] contract negotiations started off with intensive negotiations about the project costs [...] since the local information we had was scant and of course your financial consultants can only deal with the information that you have available for them and [...] because there is no other similar project elsewhere in the country. &quot; (Project Manager)</td>
<td>No comment</td>
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<td></td>
<td>&quot;[...] [private partner’s representative] talked the Fire Services language [...] and he did more than the job [...]” (former Training Director)</td>
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<td></td>
<td>&quot;[...] in contrast to various other private partner personnel, [private partner’s representative] assisted the Fire Authorities in writing the technical training manual.” (former Training Director)</td>
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<td>&quot;[...] what we kept saying to them [private partner] was that you do realise that your reputation is going to be on the line [...] because this is a new phenomenon in the fire service, if it takes off it will be quite rewarding, but if you do not deliver what we are looking for in our small community we will have to ensure that you are not employed again.” (Project Manager)</td>
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<tr>
<td>Phase</td>
<td>Event</td>
<td>Buyer’s Perspective</td>
<td>Supplier’s Perspective</td>
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<tr>
<td>Build</td>
<td>E3 - Supplier team change</td>
<td>“We had good contract negotiations and are very happy with the project so far […] but the team change was problematic for the overall project […]” (Public partner Project Manager) “[…] the change had a negative impact on the overall relationship […] the majority of the time in the early stages it is purely been about the construction and as such our relationship was slightly arm’s length.” (Project Manager)</td>
<td>“[…] our bidding and contract negotiation team is different from our build team and, thus teams changed during the project.” (Centre Manager)</td>
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<tr>
<td></td>
<td>E4 - Additional staircase</td>
<td>“[…] what it actually meant was that we could not train on that actual discipline because we needed an extra staircase to be provided. But because this was not a need that had been identified earlier it was legitimate for us to say we needed this, but it was also legitimate of [the private partner] to say you need to also pay for it.” (Project Manager). “[…] even though we are starting from a point of zero knowledge […] we have evolved together, but need to be reflecting those changes in the actual contract […] for example, the additional staircase needed to be reflected in the contract […]” (Project Manager) “[…] every time something changed we [public and private partner] did not necessarily want to go running off to our various lawyers and spend a lot of time and money. If there was just a minor change to the operational relationship […] we set up a working agreement which contains the most important terms on day-to-day basis […]” (Project Manager) “[…] to take a partnership approach in future years, so it seems a sensible one to adopt. We have still got a very good relationship and there is no angst to the relationship so far and again that seems a positive way […] [the private partner] was very helpful and understanding […]” (Former Training Director)</td>
<td>“[…] contract variations, like the additional staircase example, take up a lot of our time and those changes frequently occurred during the late build, early operate phase […]” (Centre Manager) “[…] we jointly worked together to find a suitable solution to incorporate an additional staircase […] providing fire training for our partner […] it shows that we are working as partners.” (Centre Manager)</td>
</tr>
<tr>
<td>Phase</td>
<td>Event</td>
<td>Buyer’s Perspective</td>
<td>Supplier’s Perspective</td>
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<td>“[...] the water pipe system had not been correctly installed by one of the contractors and there was a series of leaks around the building and most of these leaks have involved class rooms getting damp [...] at the time we were under utilising our spaces then we could just move class rooms. We could not see what the point of punishing the provider is, when it is out of their control [...]” (Project Manager). “[...] there is lots of stuff going on underneath the contract, unwritten, that keeps the training centre running [...]” (Former Training Director)</td>
<td>“[...] this was caused by one of our contractors [...] we quickly resolved the problem [...] [the public buyer’s Training Director] was very helpful and understood that it was not our fault [...]” (Centre Manager)</td>
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<tr>
<td>Operate</td>
<td>E5 – Water-pipe incident</td>
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<td>“[...] the authorities starting to criticise and of course we are their marketing tool [...] and we want to generate more income through training courses [...]” (Former Training Director)</td>
<td>“[...] I do not understand their aggressive approach [...] they got trainers in to teach some courses [...] why should we train up our own trainers [...] we need to have some meetings and sit down [...] open up the contract again [...]” (Centre Manager)</td>
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<tr>
<td></td>
<td>E6 – 3rd party income generation</td>
<td>“[...] it is relatively easy for [the private partner] to develop third party income generation [...] and I am talking to [the private partner’s Centre Manager] about the future and I told him that we will not do it for you all the time [...] what they have got is trainers, bring them in [and] we will train them up [...] and you [private partner] run it yourself so that takes the weight off my trainers in terms of third party income eventually.” (Training Director)</td>
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<td>E7 – Prepare for benchmarking</td>
<td>“[...] the project is now in a phase where we have to be more business minded [...] this change needs to be reflected during the benchmarking exercise [...]” (Training Director) “The project is not at a satisfactory level for us [...] and benchmarking is vital at this stage [...]” (Project Manager) “[The new Training Director] is trying to think appropriately for the ownership of the contract and the relationship that we need.” “[...] but something slowly has happened, it is a combination on fire brigades to be more commercial and then [the private partner] sat there being very happy, because they are making a huge amount of money [...]” (Project Manager)</td>
<td>“[...] I do not think the project will change much [...] we deliver our services to a high standard [...] and they [public partner] have not communicated any major issues [...] some contract negotiations will be necessary, but no major changes [...]” (Centre Manager)</td>
</tr>
</tbody>
</table>
4.5.3 Contractual and relational governance analysis

Figure 29 depicts the governance combinations and critical case events for the Gloucestershire Fire and Rescue Service case.

![Goverance Diagram](image)

**Figure 29** Gloucestershire Fire and Rescue Service governance diagram

This case is characterised by a more balanced governance interplay approach, combining contractual and relational governance equally throughout the relationship. Contractual governance was of high significance during the bid/contract negotiation phase. In addition, both parties emphasised relational governance during the early project phase, reflecting the efforts of two boundary-spanning individuals. After the ‘supplier team change’ (E3), inter-personal relationships with new supplier personnel had to be built up over time. Subsequent operational problems (E4 and E5) in the late build and early operate phase were resolved deploying a relational governance approach combined with medium contractual governance. However, occurring difficulties in generating sufficient 3rd party income (E6) and the upcoming benchmarking exercise (E7) emphasised the use of contractual governance by both parties. Overall, both parties in this case deployed five different governance combinations.

In order to analyse the governance trajectory for the Gloucestershire Fire and Rescue Service case, Figure 30 illustrates the combined score and range of contractual and relational governance across the relationship. Figures 29 and 30 provide a basis for
discussion of the separate and combined dynamics of contractual and relational governance mechanisms for this investigated case.

<table>
<thead>
<tr>
<th>Combined Score</th>
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Range
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- RELN
CTR/RELN

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**Figure 30** Gloucestershire Fire and Rescue Service combined score and range

At the start of this exchange relationship there was evidence of a balance (medium/medium) between contractual and relational governance. That is, the contracting process (E2) remained a crucial tool, but there was also an early and serious emphasis on the relational component reflecting the efforts of two boundary-spanning individuals with trust in their counterpart. This balanced approach continued as the bid/contract negotiation phase came to a close (high/high) and was perceived by participants as having helped to facilitate successful contract negotiation. For instance, interviewees from the buyer side emphasised that the site search risks had been taken by the supplier prior to signing the contract. After the supplier’s boundary-spanning individual had left the project (E3) during the build phase, this inter-personal mechanism became effectively redundant.

Over time, relationships were re-built between new employees, but in terms of the overall relational trajectory, the significance of inter-personal trust dropped from high to low almost instantly, however, the reverse process appeared to be slow, sequential and incremental. It is also interesting to note that even in this case, with great early emphasis on informal exchange, contractual governance was never categorised as being of low significance. Even during those events where the contract was effectively put to one side (e.g. the ‘water pipe incident’ (E5) event) to allow for rapid service recovery, there were subsequent revisions and it was only because both parties had detailed knowledge of contractual governance that the implications of a ‘set aside’ were felt to be tolerable. However, severe problems with the aggregation
of ‘3rd party income generation’ (E6) and the upcoming benchmarking exercise (E7) led the parties to emphasise the significance of contractual governance.

4.6 South Wales Fire and Rescue Service

4.6.1 Case background

Similar to the Gloucestershire Fire and Rescue Service case explained in 4.5, South Wales Fire and Rescue Service faced budgetary and training constraints. After health and safety investigations were conducted in the mid 1990s, concluding that fire fighters needed to receive appropriate realistic fire training, South Wales Fire and Rescue authority explored possible procurement streams to provide adequate training facilities. Constrained by limited funding possibilities, three fire brigades decided to pursue jointly the PFI procurement route in order to build a new training facility which could also accommodate fire fighter training for other fire authorities in the country. The new centre replaced several separate training locations. The training facility meets the requirements of both the uniformed and non-uniformed personnel for the fire authority. By offering education and training, the centre is vital for dissemination of best practice and rigorous, realistic fire training and fire awareness courses in the region.

The official project advert was placed in the OJEU in the early 2000s and a number of private companies expressed interest. Two years later, the preferred private sector supplier was selected and contract negotiation commenced. The South Wales Fire and Rescue Service training centre represents the private partner's second Fire and Rescue Service training facility, as well as second PFI project, after being selected the preferred private company for the Gloucestershire Fire and Rescue case. The principle public–private arrangement is a 25 year contract, worth approximately £10m for the design, build, finance and operate (DBFO) of a new training facility. Design and build work was sub-contracted to a construction company while the long-term FM service provision was sub-contracted to the private partner’s own business division. The private company also delivers portering, cleaning and maintenance services at this new training facility throughout the contract life cycle.

Fire fighters are trained in dealing with emergencies including house and industrial fires, hazardous chemical spills and road accidents through simulating these
situations at the centre’s buildings. The centre includes a multi-purpose tower with rock, pylon and building rescue faces. The training centre also includes a tunnel complex to accommodate several entry points, gradients, flooding and collapse scenarios and an industrial unit designed to provide many rescue environments. In addition, the site offers a climbing wall for rock rescue training and facilities for scaffolding rescue simulations. The training facilities are built on a 3.5 acre site and the main training building houses class and seminar rooms, offices, a canteen and accommodation. The Fire and Rescue Training Centre opened in the mid 2000s, just over a year after contract signing. The training centre was designed to provide around 12,000 student days a year and to generate third party income for the three partnering fire brigades and the private company.

Figure 31 depicts the identified critical case events across the three project phases for the South Wales Fire and Rescue Service case.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Bid/Contract</th>
<th>Build</th>
<th>Operate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Events</td>
<td>Output specification work</td>
<td>Contract negotiations</td>
<td>Regular meetings</td>
</tr>
<tr>
<td>Event Identifier</td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
</tr>
</tbody>
</table>

**Figure 31** South Wales Fire and Rescue Service events
**4.6.2 South Wales Fire and Rescue Service project phases**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Event</th>
<th><strong>Buyer’s Perspective</strong></th>
<th><strong>Supplier’s Perspective</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F1 – Output specification work</td>
<td>“[…] we did realise right from the start that we needed to invest resources up-front to get the output specification right […] we did not want to lose a lot of time and money because we did not get it right the first time […]” (Project Director)</td>
<td>“[…] and our resources were all centred on getting the output specification right. […] it is important to get both parties in the same room and to set out a robust output specification for the overall project […]” (Centre Manager)</td>
</tr>
<tr>
<td></td>
<td>F2 – Contract negotiations</td>
<td>“[…] it was very important to be commercially minded right from the start, but also to understand that you are probably end up working with [the private partner] for over 25 years […]” (Training Director)</td>
<td>“[…] contract negotiations are vital for the whole relationship […] and it is important to maintain a good working relationship between both parties […]” (Centre Manager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] Once the preferred bidder was selected, we went into long and intense contract negotiations […]” (Project Director)</td>
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<td>“[…] it was vital to spend enough time at the outset of the contract negotiation to understand each other’s point of view, but we did not want to end up wasting months and months on negotiating the contract […] we learned from Gloucestershire Fire and Rescue Service […] their project manager told us about their experiences […] and we also wanted to reach financial close within an appropriate timeframe.” (Project Director)</td>
<td></td>
</tr>
<tr>
<td>Phase</td>
<td>Event</td>
<td>Buyer’s Perspective</td>
<td>Supplier’s Perspective</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>---------------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| Build | F3 – Regular meetings | “[…] we did not have many arguments during the build phase, because being straight with each other, saying this is what we need has been the way forward […]” (Project Director)  
“[…] they [private supplier] knew what they were doing […] I mean they built a training facility before for Gloucestershire Fire and Rescue Service […] and we were just carrying on, doing what we did before just in a different location […] regular meeting did ensure a smooth build phase of the project.” (Project Director)  
“[…] we had put in place regular meetings between senior personnel to ensure constant progress and to occupy the training centre on day one […]” (Training Director) | “ […] regular meetings among senior personnel were most helpful to address relationship difficulties […] it was also helpful to get to know your counterpart and to see them face to face […] it helped to resolve problems quicker than sending around emails and faxes […]” (Centre Manager) |
| Build | F4 – Contract renegotiations | “[…] someone said, we will do regard this relationship to be a junior partnership arrangement at the outset […] but we are learning quickly and that is why we needed to change the emphasis and to try and level the playing field […] but at the moment they [private supplier] have resources and banquette advantage that we do not have […]” (Project Director)  
“We (public buyer) needed to reflect changes in the relationship and variations to the building in the contract […] these leading to contract renegotiations before we opened the facility […]” (Training Director)  
“[…] I guess contract renegotiations are normal to reflect an on-going relationships […] and changes in the contract are needed […] you just want to make sure you get everything incorporated into the contract […]” (Project Director) | No comment |
<table>
<thead>
<tr>
<th>Phase</th>
<th>Event</th>
<th>Buyer’s Perspective</th>
<th>Supplier’s Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate</td>
<td>F5 – 3rd party income generation</td>
<td>“We do have the occasional disagreements […] Whether it has to do with how a course is delivered, who delivers it or even the allocation of points you use for it […]” (Project Director)</td>
<td>“[…] we had a lot of senior level meetings to discuss the amount of 3rd party income generation […] we needed to make sure that we reach a certain threshold of income generation and that the trainers are fully utilised […]” (Centre Manager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] regarding 3rd party income generation, we needed to refer to the contract and emphasise within the contract what the private supplier’s obligations are […]” (Chief Fire Officer)</td>
<td>“[…] we have to work together with our partner and consider bringing in more money from outside […] offer courses to non-uniformed personnel and companies to generate an appropriate level of income for the centre […]” (Centre Manager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] the training centre costs a significant amount of money to maintain. We also look for the opportunity for 3rd party income, which so far did not happen […]” (Project Director)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] officers at the centre are executing the contract, but still maintain a viable working relationship with the people on-site. We have a commission in our specific contract that refers to 3rd party income generation and the more that unit is publicised, the more it could generate […]” (Project Director)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F6 – Buyer team change</td>
<td>“[…] we hired a new liaison manager […] a non-uniformed manager to be a ‘gate-keeper to turn culture’ […] we need someone who is familiar not just with uniformed officers, but has experience in dealing with commercial organisations and 3rd party involvement […]” (Project Director)</td>
<td>“[…] I do not understand there rather aggressive approach to drive income generation by switching their manager […]” (Centre Manager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] historically, we had the management of the unit delivered by a uniformed officer who was primarily a fire fighter […] but we need more commercially minded management to drive income generation for the centre.” (Training Director)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F7 – Prepare for benchmarking</td>
<td>“[…] the contract sets out to benchmarking the provider’s services every 3 years […] we are fairly happy […] saying that, we also need to acknowledge that more income needs to be generated […]” (Training Director)</td>
<td>“[…] benchmarking is a number crunching exercise really […] and we will probably have lengthy meetings again to negotiate course prices, point allocation etc. […]” (Centre Manager)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] because we got the facility and what we need to know is, are we making the best use of it? […]” (Project Director)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>“[…] we need to change the way we work and develop the relationship further. Almost pushing the boundaries […] So, we are also currently looking at other options of improving income generation […]” (Training Director)</td>
<td></td>
</tr>
</tbody>
</table>
4.6.3 Contractual and relational governance analysis

Figure 32 depicts the governance combinations and critical case events for the South Wales Fire and Rescue Service case.

<table>
<thead>
<tr>
<th></th>
<th>14%</th>
<th>86%</th>
<th>14%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational Governance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F3</td>
<td>F2</td>
<td>F4</td>
</tr>
<tr>
<td>L</td>
<td></td>
<td>F1</td>
<td>F6</td>
</tr>
</tbody>
</table>

Figure 32  South Wales Fire and Rescue Service governance diagram

The majority of events were governed by high contractual governance (86%) combined with low to medium relational governance (29% and 71% respectively). During the bid/contract negotiation both parties relied predominantly on contractual governance during this phase (F1 and F2). Buyer and supplier organisations undertook limited attempts to build up actively trusting inter-personal relationships during the bidding and contract negotiation phase. However, both organisations set up a series of ‘regular meetings’ (F3) and joint working groups to overcome previously encountered relationship difficulties and to build up inter-personal relationships. This led to an increase in relational governance. However, disputes regarding the low level of ‘3rd party income generation’ (F5) and the change of the buyer team (F6) during the early operate phase increased the significance of contractual governance. The public buyer hired a non-uniformed manager with sufficient project experience to increase ‘3rd party income generation’ (F5 and F6). The ‘buyer team change’ (F6) and the forthcoming benchmarking exercise (F7)
emphasised the use of contractual governance by both parties. Overall, both parties in this case deployed three different governance combinations.

In order to analyse the governance trajectory for the South Wales Fire and Rescue Service case, Figure 33 illustrates the combined score and range of contractual and relational governance across the relationship. Figures 32 and 33 provide a basis for discussion of the separate and combined dynamics of contractual and relational governance mechanisms for this case.

<table>
<thead>
<tr>
<th>Combined Score</th>
<th>Bid/Contract</th>
<th>Build</th>
<th>Operate</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Range</th>
<th>CTR</th>
<th>RELN</th>
<th>CTR</th>
<th>RELN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>-1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event Identifier</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>F6</th>
<th>F7</th>
</tr>
</thead>
</table>

**Figure 33** South Wales Fire and Rescue Service combined score and range

The significance of contractual governance was emphasised throughout the project phases. The majority of events (six out of seven) were characterised by high significance of contractual governance. Both parties invested a significant amount of time to ensure a high degree of contractual completeness (F1 and F2). Hence, the bidding and contract negotiation phase was typified by high contractual governance and a total absence of relational governance. In the early build phase both parties recognised the importance of regular meetings (F3) and joint working groups to establish more collaborative relationships on an inter-personal and inter-organisational level. While contract renegotiation remained a crucial tool, there was also an emphasis on the relational component reflecting the efforts of both partnering organisations to build up inter-organisational trust. However, these efforts came to a standstill in the early build phase which was characterised by severe problems with the aggregation of ‘3rd party income generation’ (F5). The buyer organisation decided to hire an experienced project manager who emphasised the importance of 3rd party income generation. The ‘buyer team change’ (F6) and the upcoming benchmarking exercise (F7) led both parties to stress the significance of contractual governance. This project phase was also characterised by a low level of information.
sharing and problem solving between the organisations. Missing inter-personal relationships combined with disputes over income generation during the operate phase led to a high emphasis on contractual governance combined with low to medium significance of relational governance.

4.7 Chapter Summary

This chapter has reviewed the findings of the individual cases and provided an individual case analysis in terms of contractual governance, relational governance and governance interplay. The next chapter analyses the cases in a comparative fashion in order to highlight the similarities and differences.
CHAPTER FIVE: CROSS CASE ANALYSIS

Introduction to Chapter

The purpose of this chapter is to provide a detailed analysis of the main concepts that are included in the study, in a manner that integrates the findings from each of the cases. The previous chapter identified different events across the investigated cases. The following sections combine the within-case analysis of contractual and relational governance and their interplay regarding each case. The chapter presents the analysis by successively addressing the research questions. Section 5.1 reviews the roles of contractual and relational governance. Subsequently, in section 5.2 governance combinations at different points in time are investigated. Governance trajectories and their impact on overall performance are discussed in section 5.3. Section 5.4 contains the chapter summary.

5.1 Roles of Contractual and Relational Governance

This section presents the findings addressing research sub-questions one and two:

*What is the role of contractual governance in supply arrangements over time?*

*What is the role of relational governance in supply arrangements over time?*

The significance of the roles of contractual and relational governance in supply arrangements across the investigated cases are illustrated in Figures 34 and 35.

Figure 34 illustrates the significance of contractual governance across the investigated cases and it has emerged that the vast majority of events were governed by high contractual governance. For instance, events in the: Swindon Hospital, Oxford Hospital, Surrey Waste Management and the South Wales Fire and Rescue Service cases were governed by high contractual governance in 80% or more of the events in these cases. Furthermore, contractual governance in these cases was predominantly deployed to resolve relationship problems. Early attempts to build up inter-personal relationships through, for instance, the ‘tendering seminar’ event in the Swindon Hospital case, did not build up a reservoir of relational governance that could overcome the strong emphasis on contractual governance in subsequent phases.
Similarly, in the Surrey Waste Management case, limited attempts were undertaken to actively build up trusting inter-personal relationships among the partnering organisations until external pressure was exercised to turn around the project. In this context, the new treatment option appraisal was the first active attempt by both organisations to work together to achieve a better performing project. The long-term nature of the supply arrangements encouraged the drafting of complex contracts, which included terms that described the obligations of the partnering organisations for future contingencies and provided penalties for undesired behaviour. In these two cases, contractual governance was deployed to counteract opportunistic behaviour, emphasising the safeguarding function of the contract. However, case findings such as the ‘portering problems’ event in the Oxford Hospital case, illustrate that non-specification of responsibilities and guidelines may elevate operational problems, leading to mutual blaming behaviour and disruptive service delivery. Throughout this relationship, subsequent regular contract variations were arranged to reflect relationship changes in the contract.

In contrast to the other four cases, events in the Kirklees Waste Management and the Gloucestershire Fire and Rescue Service cases were governed by a mixture of high
and medium contractual governance. The early project phase for both these cases was governed by high contractual governance and there was less emphasis on relational governance. Over time, the contracting parties in these cases observed each others’ commitment to this long-term relationship, building up inter-personal relationships through regular meetings and mutual investments, such as the development of the ‘visitor and education centre’ in the Kirklees Waste Management case. The relationship problems that occurred, such as the ‘change of landfill regulations’ event, were resolved by deploying a balanced governance approach that was characterised by high contractual and relational governance. Similarly, in the Gloucestershire Fire and Rescue Service case subsequent operational problems in the late build and early operate phase were resolved by deploying medium contractual governance combined with medium to high relational governance. However, in this case difficulties that occurred in generating sufficient 3rd party income and the upcoming benchmarking exercise led to a pronounced use of contractual governance by both parties.

![Graph showing relational governance across cases](image)

**Figure 35** Relational governance across the investigated cases

Figure 35 illustrates the significance of relational governance across the investigated cases. The majority of events in the Swindon Hospital, the Oxford Hospital and the Surrey Waste Management cases were governed by low relational governance.
combined with high contractual governance. For example, both parties in the Oxford Hospital case actively encouraged the establishment of inter-personal relationships during the build phase by co-locating their teams in a joint office location next to the construction site. Contract renegotiations at the end of the build phase were characterised by an increased information flow across the partnering organisations, because of previously built up inter-personal relationships. Similarly, both parties in the Surrey Waste Management case went through a lengthy contract negotiation process during the bidding phase. However, the subsequent build phase was described as having severe relationship problems, leading to mutual blaming and lengthy contract renegotiations. Nevertheless, limited attempts were undertaken to actively build up a trusting inter-personal relationship among the partnering organisation until the project came under scrutiny by the Department of Environment, Food and Rural Affairs (DEFRA) as it was not meeting the government’s waste recycling targets. The new treatment option appraisal, during the operate phase, was an active attempt by both organisations mutually to achieve a higher performing project. Regular meetings and joint working groups were installed to overcome previously encountered relationship difficulties.

By contrast, the majority of events in the Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service cases were governed by medium relational governance. Contractual governance was of high significance during the bidding and contract negotiation phase in both of these cases. In addition, all of the parties involved also emphasised relational governance during the early project phases. For instance, the efforts of two boundary-spanning individuals in the Gloucestershire Fire and Rescue Service case facilitated the site search during the early project phase. In this regard, the private partner supported the public partner in finding an appropriate site for the training facility and in planning future training needs. Although the contracts involved substantial bi-lateral investment, the explicit attempts to develop trust that occurred in the early phases of the Gloucestershire Fire and Rescue Service case, such as benefit sharing and relationship termination procedures, were felt by both parties to have significantly helped with sensitive issues. It was also found that the boundary-spanning relationships facilitated the exchange of sensitive, proprietary information across the contracting parties. Events in the Kirklees Waste Management case were mostly governed by medium or high relational governance. Here, the early
project phase was governed by high contractual governance and there was limited emphasis on relational governance. However, both parties over time recognised the need for commitment to this long-term relationship and subsequently built up inter-personal relationships through regular meetings and information exchange. Consequently, constant information exchange and a shared commitment towards the long-term relationship on an inter-personal level, helped to build up trusting relationships, which resulted in the joint project of developing the ‘visitor and education centre’ that was outside the contract framework.

Having investigated the roles of contractual and relational governance in the supply arrangements, in the next sections the findings on governance combinations at different points in time during the long-term supply relationship are collated.

5.2 Governance Combinations at Different Points in Time

This section presents the findings addressing research sub-question three:

*What are the governance combinations at different points in time?*

In order to support the qualitative data analysis and to investigate governance combinations at different points in time and the impact of governance trajectories on the overall performance, Table 14 summarises performance indicators across the investigated cases. Interviewees’ responses for on time and budget measures have been triangulated with secondary data such as firm documents and reports from Audit Office and H.M. Treasury. On time measures for the bid/contract negotiation and build phase were reported by interviewees and verified by company and government reports. Similarly, measures for the budget achievements across the project were reported by interviewees and confirmed by government reports.

The overall project satisfaction is a combined measure of supplier and buyer interviewees’ responses, deploying a 5-point Likert scale, ranging from very poor to very good. Overall performance is measured on a 5-point scale and represents a simplified, compound measure, derived from the previous five performance measures. In order to combine various data sources, ranging from interview data to secondary data, the overall performance was derived by allocating points to the five performance measures. On time and budget measures were given zero points if on time and on budget, and one point was deducted for delays and going over budget,
respectively. For example, in the Swindon Hospital case two points were deducted for delays during the bid/contract negotiation phase and the project being over budget. Overall project satisfaction was scored in a similar manner: zero points were given for mediocre performance with two points added for very good performance, and one for good performance. Where performance was poor or very poor, one point or two were deducted, respectively. For instance, in the Swindon Hospital case one point was deducted for the overall project satisfaction as the buyer side rated it ‘poor’. In order to arrive at the overall performance of the cases, the assigned points were added up and scored as follows: zero points for mediocre overall performance, one to three points for good overall performance, over three points for very good overall performance, negative one to three points for poor overall performance, and four and more negative points for very poor overall performance. In the Swindon Hospital case, for instance, overall performance was rated poor as the final score was minus three points.

<table>
<thead>
<tr>
<th>Performance indicators</th>
<th>Swindon Hospital</th>
<th>Oxford Hospital</th>
<th>Kirklees Waste Manag.</th>
<th>Surrey Waste Manag.</th>
<th>Gloucestershire Fire and Rescue Service</th>
<th>South Wales Fire and Rescue Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>On time – bid/contract</td>
<td>Delayed</td>
<td>On time</td>
<td>On time</td>
<td>Delayed</td>
<td>Delayed</td>
<td>On time</td>
</tr>
<tr>
<td>On time – build</td>
<td>On time</td>
<td>On time</td>
<td>On time</td>
<td>Delayed</td>
<td>On time</td>
<td>On time</td>
</tr>
<tr>
<td>Budget achievement</td>
<td>Over budget</td>
<td>Over budget</td>
<td>On budget</td>
<td>Over budget</td>
<td>On budget</td>
<td>On budget</td>
</tr>
<tr>
<td>Overall project satisfaction - Buyer</td>
<td>Very good</td>
<td>Good</td>
<td>Mediocre</td>
<td>Poor</td>
<td>Very poor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>Good</td>
<td>Mediocre</td>
<td>Poor</td>
<td>Very poor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mediocre</td>
<td>Mediocre</td>
<td>Poor</td>
<td>Very poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>Poor</td>
<td>Good</td>
<td>Very good</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very poor</td>
<td>Very poor</td>
<td>Good</td>
<td>Very good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Overall project satisfaction - Supplier | Very good | Good | Mediocre | Poor | Very poor | |
|                                         | Good      | Good | Mediocre | Poor | Very poor | |
|                                         | Mediocre  | Mediocre | Poor | Very poor | |
|                                         | Poor      | Poor | Good | Very good | |
|                                         | Very poor | Very poor | Very poor | |

| ∑ Overall Performance | Very good | Good | Mediocre | Poor | Very poor | |
|                       | Good      | Good | Mediocre | Poor | Very poor | |
|                       | Mediocre  | Mediocre | Poor | Very poor | |
|                       | Poor      | Poor | Good | Very good | |
|                       | Very poor | Very poor | Very poor | |

**Table 14** Performance indicators
Following the overall performance outlined in Table 14, two broad groups of cases can be identified: (i) the better performing cases with an overall performance of good or very good, and (ii) the worse performing cases with an overall performance of very poor, poor or mediocre. The better performing cases were: Kirklees Waste Management, Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service and the worse performing case were: the Swindon Hospital, the Oxford Hospital and Surrey Waste Management.

5.2.1 Combined score and range of governance combinations

In this sub-section the combined score and range of contractual and relational governance mechanisms are examined across the investigated cases. Whilst the combined score of the governance combination illustrates the significance of both governance mechanisms during the relationship, the range depicts the exact governance combination across the relationship. Table 15 and Figure 36 summarise the cross-case findings for the combined scores of the governance combinations. Percentages, as indicated in the tables and figures, should not be seen as representing absolute percentages, but rather as indications of the significance of governance combinations.
### Table 15  Combined score of governance combinations

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6 CTR – H RELN – H</td>
<td>1/7</td>
<td>1/7</td>
<td></td>
<td></td>
<td></td>
<td>2/40 = 5%</td>
</tr>
<tr>
<td>5 CTR – H:M RELN – M:H</td>
<td>2/7 (2 out of 7 events)</td>
<td>2/5</td>
<td>4/7</td>
<td>2/7</td>
<td>4/7</td>
<td>16/40 = 40%</td>
</tr>
<tr>
<td>4 CTR – H:M:L RELN – L:M:H</td>
<td>5/7</td>
<td>2/5</td>
<td>4/7</td>
<td>4/7</td>
<td>3/7</td>
<td>20/40 = 50%</td>
</tr>
<tr>
<td>3 CTR – H:L RELN – L:H</td>
<td>1/5</td>
<td>1/7</td>
<td></td>
<td></td>
<td></td>
<td>2/40 = 5%</td>
</tr>
<tr>
<td>2 CTR – L RELN – L</td>
<td>(5 to 6)</td>
<td>2/7 = 29%</td>
<td>2/5 = 40%</td>
<td>5/7 = 71%</td>
<td>2/7 = 29%</td>
<td>3/7 = 43%</td>
</tr>
<tr>
<td></td>
<td>(2 to 3)</td>
<td>5/7 = 71%</td>
<td>2/5 = 40%</td>
<td>2/7 = 29%</td>
<td>4/7 = 57%</td>
<td>4/7 = 57%</td>
</tr>
</tbody>
</table>

### Figure 36  Combined score of governance combinations across cases


\[\text{Better performing cases} \]  
(Kirklees Waste Manag., Gloucestershire F. and R. Serv. and S. Wales F. and R. Serv.)  

\[\text{Worse performing cases} \]  
(Swindon Hospital, Oxford Hospital and Surrey Waste Manag.)
The better performing cases: Kirklees Waste Management, Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service, are characterised by more events with a combined score of 5 or 6 (58%). A more balanced governance approach (e.g. high/high) was deployed in the better performing cases to resolve relationship problems. Cases exhibiting worse overall performance: Swindon Hospital, Oxford Hospital and Surrey Waste Management, display more events with a combined score of 4 or 3 (68%). More specifically, all events with combined score 4 for the poorer performing cases consisted of high contractual and low relational governance significance (that means range 2), whereas only half of the events in the better performing cases were made up of this governance combination. Furthermore, the use of contractual procedures and guidelines throughout the relationship was of high significance for the worse performing cases. Faced with severe operational problems combined with team changes and limited pro-active approaches to build up inter-personal relationships, contractual governance was the prevailing approach for governing the relationship. The other half of the events in the better performing cases involved using both governance mechanisms in a balanced governance approach. In these cases, whilst great emphasis was placed on the development of inter-personal relationships and informal meetings as part of contractual governance, relational governance never dropped below medium significance.

Table 16 and Figure 37 summarise the cross-case findings for the range of the governance combinations.
The significance of contractual governance emerges as being dominant across the investigated cases (74% of events score 1 or 2). A more balanced approach (18%
score 0) and a prevailing relational governance approach (8% score -1) represent only a minority of events. In addition, no events are observed in these investigated cases as presenting high relational governance combined with low contractual governance (that is score -2). However, examining the results in more detail, some differential patterns can be identified between the better and worse performing cases.

The latter cases exhibit a higher degree of contractual governance emphasis across their events (95% in range 1 and 2). Notably, across the three investigated cases exhibiting worse overall performance, only one single event with balanced governance interplay (that means score 0) was found.

Moreover, it can be seen that the two worst performing cases (Swindon Hospital and Surrey Waste Management) placed emphasis on contractual governance mechanisms to an even higher degree than at the Oxford Hospital, the other worse case. That is, in both cases there are scores of range 2 in the majority of their events. In addition, public and private organisations in these relationships deployed contractual governance to overcome relationship difficulties that occurred such as operational problems. In all three worse cases, changing personnel in the buyer and supplier teams and limited information sharing across the partnering organisations hindered the building up of relational governance. Both partnering organisations in the Oxford Hospital case were seeking to adopt a contractual governance approach combined with limited emphasis on relational governance (score 1) in the majority of events. This approach was hindered by severe operational problems combined with the appointment of a new public organisation’s project director in the early operate phase, which led to a heightened emphasis on contractual governance mechanisms to resolve relationship problems (score 2). In contrast, the better performing cases (Kirklees Waste Management, Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service) adopted a wider range of governance combinations (from 2 to -1), balancing their distribution between scores -1 to 1 for the majority of the events (76%). Although the partnering organisations in all three of these cases placed an emphasis on contractual governance, proactive approaches were undertaken to build up relational governance throughout the relationship. For instance, both organisations in the Kirklees Waste Management case emphasised regular meetings at the outset of the relationship to increase relational governance.
In contrast to the worse performing cases, all three better performing cases rarely deployed a high contractual and low relational governance combination as illustrated by range 2 (24%). In fact, these cases applied high contractual governance (combined with low relational governance) for only five events in total. For example, contractual governance was emphasised in the Kirklees Waste Management case during the output specification work and in the Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service cases when changing the supplier team and preparing for benchmarking. The organisations involved in the Kirklees Waste Management and the South Wales Fire and Rescue Service cases emphasised the importance in establishing a well-specified contract at the outset of the relationship. In the Gloucestershire Fire and Rescue Service case, inter-personal relationships were effectively redundant after the supplier’s boundary-spanning individual left the project, resulting in increased emphasis being placed on contractual governance to govern the relationship.

5.2.2 Combined score and range of events

This sub-section examines the combined score and range of contractual and relational governance mechanisms at different points in time. Table 17 summarises the cross-case findings for the combined score of the governance combinations across the different events.
<table>
<thead>
<tr>
<th>Case</th>
<th>Swindon Hospital</th>
<th>Oxford Hospital</th>
<th>Kirklees Waste Management</th>
<th>Surrey Waste Management</th>
<th>Gloucesters. F. and R. Service</th>
<th>South Wales F. and R. Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Score</td>
<td>CTR – H RELN – H</td>
<td>Change of landfill regulations</td>
<td>Contract negotiation</td>
<td>Change of landfill regulations</td>
<td>Contract negotiation</td>
<td>Contract negotiation</td>
</tr>
<tr>
<td>6</td>
<td>DTR – H; M RELN – M; H</td>
<td>Tendering seminar; Prepare for benchmarking</td>
<td>Team co-location; Contract renegotiation</td>
<td>Contract negotiation; Contract renegotiation; Visitor and education centre; Acquiring additional land</td>
<td>Regular meetings; New treatment option appraisal</td>
<td>3rd party income generation; Water-pipe incident</td>
</tr>
<tr>
<td>5</td>
<td>DTR – H; M RELN – M; H</td>
<td>Site search and planning permission; 430 contract changes; Lift problems; Gritting car park; Relationship away-day</td>
<td>Corridor solution (incl. contract negotiation); Portering problems</td>
<td>Output specification work; Regular meetings</td>
<td>Site search (2 years); Supplier team change; Prepare for benchmarking ; Additional staircase</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>DTR – H; M; L RELN – L; M; H</td>
<td>Output specification work; Regular meetings</td>
<td>Output specification work; Regular meetings</td>
<td>Site search (2 years); Supplier team change; Prepare for benchmarking ; Additional staircase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>DTR – H; L RELN – L; H</td>
<td>Change of supplier team</td>
<td>Change of supplier team</td>
<td>Public team change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>DTR – L RELN – L</td>
<td>Public team change</td>
<td>Public team change</td>
<td>Public team change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 17** Combined score of events across cases

The majority of events achieved a combined score of 4 (50%). Score 4 for the worse performing projects (Swindon Hospital, Oxford Hospital and Surrey Waste Management) consisted mostly of a high emphasis on contractual governance combined with a low significance of relational governance (that is range 2). For instance, events such as: ‘site search and planning permission’ in the Swindon Hospital case, ‘portering problems’ in the Oxford Hospital case and ‘missing planning permission’ in the Surrey Waste Management case were characterised by a high significance of contractual governance. Moreover, both public and private partners applied and interpreted the contract in its strictest form, for instance by applying penalty systems, to resolve relationship problems. In contrast, only around half of the events in the better performing cases (Kirklees Waste Management, Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service) involved this governance combination. The other half of the events in these cases
were typified by a balanced significance of both governance mechanisms (medium/medium). In this vein, events such as: ‘regular meetings’ in the Kirklees Waste Management and the South Wales Fire and Rescue Service cases and ‘site search’ in the Gloucestershire Fire and Rescue Service case were characterised by such a balanced governance approach.

The majority of the scores of 5 comprised a high emphasis on contractual governance combined with a medium emphasis on relational governance. Even though events such as: ‘tendering seminar’ (Swindon Hospital), ‘team co-location’ (Oxford Hospital) and ‘new treatment option appraisal’ (Surrey Waste Management) emphasised the significance of relational governance mechanisms, contractual governance mechanisms were always deployed to safeguard investments, as in the ‘new treatment option appraisal’ event, or to formalise project arrangements, as in the ‘team co-location’ event. Three events: ‘visitor and education centre’ and ‘acquiring additional land’ in the Kirklees Waste Management case and the ‘water-pipe incident’ event in the Gloucestershire Fire and Rescue Service case, exhibited high significance of relational governance combined with medium significance of the contractual form. All three of these events occurred during the operate phase after both partners had already observed each other’s willingness and goodwill during the previous relationship phases. However, it should be noted that both partners deployed the contract either to safeguard additional investments, such as in the ‘visitor and education centre’ event, or to reflect the relationship changes in the contract, as in the ‘acquiring additional land’ event.

Two events: ‘change of landfill regulations’ in the Kirklees Waste Management case and ‘contract negotiations’ in the Gloucestershire Fire and Rescue Service case, were characterised by a balanced governance combination with both mechanisms being of high significance. In this context, whilst both public and private organisation tested and observed the partnering organisation’s goodwill in previous events, contractual governance significance was high, as ongoing project changes, such as regulations and mutual investments, needed to be formally agreed upon and reflected in the contract. Two events: ‘change of supplier team’ in the Oxford Hospital case and ‘public team change’ in the Surrey Waste Management case were typified by
medium significance of contractual governance combined with low relational governance.

In the following paragraphs the emerging patterns, regarding the significance of both governance mechanisms for different events across the cases are discussed. Table 18 summarises the cross-case findings for the range of governance combinations deployed for different events.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 CTR - H RELN – L</td>
<td></td>
<td>Site search and planning permission; Lift problem; Gritting car park</td>
<td>Corridor solution (incl. contract negotiation); Portering problems</td>
<td>Output specification work</td>
<td>Contract negotiation; Missing planning permission; Missed recycling targets; Site search</td>
<td>Supplier team change; Prepare for benchmarking</td>
<td>Output specification work; Buyer team change</td>
</tr>
<tr>
<td>1 CTR - H:M RELN – M:L</td>
<td></td>
<td>Prepare benchmarking; Tendering seminar</td>
<td>Change of supplier team; Team co-location; Contract renegotiation</td>
<td>Contract negotiation; Contract renegotiation</td>
<td>Regular meetings; Public team change; New treatment option appraisal</td>
<td>3rd party income generation</td>
<td>Contract negotiations; Contract renegotiations ; 3rd party income generation; Prepare for benchmarking</td>
</tr>
<tr>
<td>0 CTR and RELN – same level</td>
<td></td>
<td>Relationship away-day</td>
<td>Regular meetings; Change of landfill regulations</td>
<td>Site search; Contract negotiation; additional staircase</td>
<td>Regular meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1 RELN – H:M CTR – M:L</td>
<td></td>
<td>Visitor and education centre; Acquiring additional land</td>
<td>Water-pipe incident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 RELN – H CTR – L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18 Range of governance combinations for different events across cases

A high emphasis on contractual governance (that is range 2) was of heightened significance whenever severe relationship problems were present, such as in the ‘lift problem’ event in the Swindon Hospital case, the ‘portering problems’ event in the Oxford Hospital case and the ‘missing planning permission’ event in the Surrey Waste Management case. Public and private organisations in these three cases deployed the contract as a tool to safeguard relationship investments, as in the ‘site search and planning permission’ event in the Swindon Hospital case, and to resolve
relationship disputes, such as the ‘gritting car park’ event in the Swindon Hospital case. However, keeping in mind the inherent contract incompleteness, placing high emphasis on contracts as dispute resolution tools was considered less useful in events such as: ‘portering problems’ in the Oxford Hospital case, ‘gritting car park’ in the Swindon Hospital case and ‘missing planning permission’ in the Surrey Waste Management case. These events were not resolved in a timely manner leading to further relationship problems, which were underpinned by limited information sharing and missing communication across partnering organisations.

The Swindon Hospital, Oxford Hospital and Surrey Waste Management cases’ events scoring 2 were mostly those that had a negative impact on the overall public-private relationship. For instance, the prolonged site search combined with ‘obtaining planning permission’ and the various hospital redesigns in the Swindon Hospital case were characterised by limited communication and information sharing between the partnering organisations, that resulted in a high emphasis being placed on contractual governance mechanisms. On the other hand, in the Kirklees Waste Management case only one event, the ‘output specification work’, during the early relationship phases, scored 2. Similarly, in the Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service cases there were only four events across the two cases that scored 2, which reflects the emphasis placed on contractual governance. In this context, the ‘supplier team change’ event in the Gloucestershire Fire and Rescue Service marking a turning point in the inter-personal relationship resulted in this score. Likewise, the ‘prepare for benchmarking’ event in the Gloucestershire Fire and Rescue Service case, where this in combination with there being an unsatisfied public partner regarding the level of 3rd party income generation, marked a negative change in the public-private relationship, i.e. until then the relationship had been perceived as performing well by the public partner.

Situations where the differences between the two governance mechanisms were less marked, but the contractual approach still received the greater emphasis (score 1) were observed in events such as: ‘tendering seminar’ (Swindon Hospital), ‘change of supplier team’ (Oxford Hospital), ‘contract renegotiation’ (Oxford Hospital, Kirklees Waste Management), ‘public team change’ (Surrey Waste Management) and ‘3rd party income generation’ (Gloucestershire Fire and Rescue Service, South Wales
Fire and Rescue Service). These events reflect the importance of contracts as a coordination tool, such as in the ‘tendering seminar’ event, and knowledge repository for relationship developments, as in the ‘contract renegotiation’ event.

An approach where the governance mechanisms were of equal significance (score 0) could be observed for events such as: ‘relationship away-day’ (Swindon Hospital), ‘regular meetings’ (Kirklees Waste Management, South Wales Fire and Rescue Service), ‘site search’ and ‘additional staircase’ (Gloucestershire Fire and Rescue Service). Regarding the first two, these events illustrate attempts to increase information flow and knowledge sharing across the partnering organisations. Both of these events occurred in the transition between project phases, that is, during the early build phase in the Kirklees Waste Management and South Wales Fire and Rescue Service cases and during the early operate phase in the case of the Swindon Hospital.

Events, such as ‘site search’ and ‘additional staircase’ in the Gloucestershire Fire and Rescue Service case and ‘change of landfill regulations’ in the Kirklees Waste Management case, also illustrate a flexible approach towards contract interpretation in that both parties were able to interact outside the contract to arrive at a mutually agreed solution to a problem. Those events also functioned as ‘trigger events’ that impacted on the application of subsequent governance approaches. That is, the subsequent event, such as ‘acquiring additional land’ in the Kirklees Waste Management case and the ‘water-pipe incident’ in the Gloucestershire Fire and Rescue Service case, were resolved by applying a governance approach characterised by a higher level of relational governance (score -1) than previously.

Situations where relational governance was combined with contractual governance, but the emphasis greater on the former (score -1) were observed during three events: ‘visitor and education centre’ and ‘acquiring additional land’ in the Kirklees Waste Management case and ‘water-pipe incident’ in the Gloucestershire Fire and Rescue Service case. The evidence in Chapter Four regarding the lattermost event illustrates that both parties applied a flexible approach to relationship management, deploying contracts as a “mere guidance”. No events were observed that emphasised a high relational governance approach combined with low contractual governance. Consequently, it could be argued that even in relationships typified by a high level of
information sharing and frequent communication across the partnering organisations (e.g. Kirklees Waste Management), contractual governance mechanisms play a significant role in governing the public-private relationship.

### 5.2.3 Event types

Figure 38 depicts the eight different event types and the number of events across the three project phases: bid/contract negotiation; build and operate. Each event type represents an aggregation of similar events, for example contract negotiations, contract renegotiations and contract variations are summarised under the event type ‘contracting work’.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Cases in which event type occurs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team change</td>
<td>Kirklees Waste Manag.</td>
</tr>
<tr>
<td>Mutual investment</td>
<td>Kirklees Waste Manag.</td>
</tr>
<tr>
<td>Meetings</td>
<td>Swindon Hospital</td>
</tr>
<tr>
<td>Seminar</td>
<td>Oxford Hospital</td>
</tr>
<tr>
<td>Team co-location</td>
<td>All cases</td>
</tr>
<tr>
<td>Contracting work</td>
<td>All, but Kirklees Waste Manag.</td>
</tr>
<tr>
<td>Operational problem</td>
<td>All cases</td>
</tr>
</tbody>
</table>

**Figure 38**  Event types across project phases and cases

Identified event types can be distinguished endogenously as those initiated by one of the partnering organisations or as exogenous initiative such as, for instance, a change in waste regulations. Table 19 summarises the characteristics of event types with regards to the initiators.
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Endogenous - buyer’s initiative</th>
<th>Endogenous - supplier’s initiative</th>
<th>Exogenous initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External change</strong></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Meetings</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td><strong>Team co-location</strong></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td><strong>Team change</strong></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td><strong>Operational problem</strong></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td><strong>Contracting work</strong></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Mutual investment</strong></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Table 19  Event types and initiation

In the following sub-sections the governance combinations deployed for various event types will be investigated further.

5.2.4 Event type paths

Here, the governance combinations and the paths for the eight event types across the investigated cases, as shown in Figure 38, are explained. Regarding the first two events types, team change and mutual investment, these are accompanied by figures illustrating the governance combination paths. Further figures for the remaining event types can be found in Appendix F. In the figures each arrow represents a single event for the individual event type. The arrow direction and length indicate the impact of the individual event on governance combination.
Figure 39  Team change

Four events ‘team change’ were identified in four of the cases and all of these occurred during the early bid/contract negotiation phase and the build phase. The path figure above illustrate that this particular event was governed by an emphasis on contractual governance in combination with low significance of relational governance. This is, because team changes make previously built up inter-personal and inter-organisational relationships virtually, if not completely, redundant. Moreover, it emerged that new team members tended to employ a contractual governance approach combined with low relational governance, following documented relationship guidelines and rules. In other words, formal agreements and contracts were used as written guidelines and tools to understand the status of the existing relationship and its rules and procedures.
Two ‘mutual investment’ events were identified (visitor and education centre; acquiring additional land) in one of the investigated cases, that of Kirklees Waste Management. Both of these events occurred during the operate phase, after both partnering organisations had had the chance to test each other’s goodwill and hence their commitment to the long-term relationship. Moreover, both events were characterised by an increase in relational governance combined with a decrease in contractual governance significance. In this context, the two parties involved built up trusting relationships through open communication and information sharing over time. This trusting relationship environment was necessary for the subsequent mutual investment that developed in this long-term relationship.

One ‘external change’ event was identified (change of landfill regulations) in the Kirklees Waste Management case. This event occurred during the operate phase located between two ‘mutual investment’ events. The regulatory changes needed to be reflected in the contract, which meant that contract renegotiations had to take place and variations in procedures needed to be made. Having previously built up a trusting relationship, both collaborating organisations deployed a balanced approach towards incorporating these changes into the contract. Moreover, the previously established relational governance facilitated open communication regarding the necessary contract changes, thereby helping to reduce the time involved. Overall, the impact of the change of landfill regulations was buffered by a relationship characterised by mutual understanding and commitment towards the long-term relationship.

![Figure 40 Mutual investment](image-url)
relationship. In contrast, the Surrey Waste Management case experienced severe problems caused by the regulatory change, leading to missed recycling targets and mutual blaming.

Three ‘meetings’ events were identified in two of the investigated cases, occurring during the late bid/contract negotiation and early build phases. Whilst one of these events was governed by high contractual governance combined with medium relational governance, the other two experienced a balanced approach (medium/medium). The first event occurred during the late bid/contract negotiation phase, when both parties emphasised the establishment of complete contracts. Regular meetings were seen as a means to help initiate more frequent information exchange and the formation of inter-personal relationships. However, a team change during the early build phase made previous efforts to build up inter-personal relationships redundant. The two ‘meeting’ events typified by a balanced governance approach occurred during the early build phase, facilitating the formation of inter-personal relationships and the exchange of relationship-specific information.

Two ‘seminar’ events (‘tendering seminar’ and ‘relationship away-day’) were identified in one investigated case, that of Swindon Hospital. The events occurred during the early bid/contract negotiation and early operate phases. Whilst contractual governance was of high significance at the outset of the relationship, a tendering seminar was deployed to clarify project aims and objectives across both organisations and to facilitate the establishment of inter-personal relationships. After facing severe operational problems in the build phase, the ‘relationship away-day’ event was held during the early operate phase to facilitate the development of inter-personal relationships. This event was characterised by a balanced governance approach (medium/medium), which led to increased information flow across the partnering organisations.

One ‘team co-location’ event was identified and this occurred in the early build phase of the Oxford Hospital case. Having gone through a lengthy contract negotiation process, both parties realised that a more proactive approach towards the formation of relational governance was necessary. The dispersed team locations did not support an effective communication flow across the contracting partnering organisations, resulting in lengthy and complicated processes with regards to
problem solving. The team co-location facilitated frequent communication flow and allowed for the resolution of problems on a face-to-face basis, thus a balanced approach of contractual governance combined with inter-personal relationships was deployed.

Seventeen ‘contracting work’ events, including: contract negotiation, contract renegotiation and preparing benchmarking, were identified across all the investigated cases. Eight of these events occurred during the bid/contract negotiation phase, four during the build phase and five during the operate phase. One ‘contracting work’ event, during the late bid/contract negotiation phase of the Gloucestershire Fire and Rescue Service case, was governed by a balanced governance approach (high/high). During the early bid/contract negotiation phase, the private supplier invested a substantial amount of time finding an appropriate site for the training centre and took over the risks involved. This event illustrates the commitment of the private partner towards the long-term relationship. Moreover, the development of inter-personal relationships across the participating organisations’ personnel facilitated the contract negotiations phase. However, the majority of the ‘contract work’ events was governed by high contractual governance combined with low to medium significance of relational governance. That is, this governance combination reflects the emphasis on contractual mechanisms over relational governance during most of these events. Interviewees across the cases reported that a great deal of emphasis was put into “getting the contract right”. Contract renegotiations and variations during the build and operate phase were seen as crucial to reflect relationship developments, as one interviewee put it “everything needs to be reflected in the contract”.

Ten ‘operational problem’ events, such as ‘water-pipe incident’ and ‘gritting car park’, were identified across five cases. One occurred during the bid/contract negotiation phase, three during the build phase and six during the operate phase. The majority of these events involved high contractual governance combined with low relational governance. This reflects the importance of formal agreements and contracts in resolving relationship difficulties regarding operational problems. In this vein, interviewees in the Swindon Hospital, Oxford Hospital and Surrey Waste Management cases emphasised the importance of formal procedures which had to be followed for resolving such problems. Moreover, it was reported in these cases that
relational governance, for instance in the form of inter-personal relationships, was rarely used to overcome these difficulties. By contrast, whilst the Kirklees Waste Management case did encounter operational problems during its build and operate phase, interviewees did not identify and emphasise these as critical events. In fact, minor operational problems in this case were solved using a more relational governance approach that was characterised by inter-personal relationships and frequent information sharing across the participating organisations. Furthermore, contractual governance was only deployed whenever there was need clarify payment issues or to revise the contract so as to reflect any relationship developments.

Operational problems in the Gloucestershire Fire and Rescue Service case were either governed by a balanced approach (medium/medium) or by high relational governance combined with medium contractual governance. Contractual governance remained a crucial tool throughout the relationship, but there was also a serious emphasis on relational governance from an early stage. In this respect, the significance of relational governance in this case can be traced back to the efforts of two boundary-spanning individuals in developing a trusting relationship during the bid/contract negotiation phase. With a change in the supplier team during the early build phase, both partners aimed to rebuild inter-personal relationships between the new employees. As a result, two subsequent operational problems, ‘additional staircase’ and ‘water-pipe incident’, were resolved by deploying a governance approach with an emphasis on relational governance. However, in this case contractual governance was never categorised as being of low significance and contracts were drawn up to clarify financial rectifications and subsequent contract revisions.

In conclusion, with regards to the eight identified event types a variety of governance combinations were deployed across the investigated cases. From this analysis, it has emerged that only six governance combinations (out of nine available) were deployed. In particular, contractual governance was never categorised as being of low significance, underlining the importance of formal agreements and contracts across the various event types and project phases. The cross-case findings also illustrate the importance of inter-personal relationships in efficiently resolving relationship problems. However, considering the fragility of inter-personal
relationships, especially in long-term projects with high staff turnover, it has emerged that partnering organisations usually stress the importance of contractual governance.

Having analysed the cross-case findings regarding the impact of governance combinations at different points in time, in the following section a more dynamic view of governance combinations is adopted by investigating their trajectories.

5.3 **Impact of Governance Trajectories on Overall Performance**

This section presents the findings addressing research sub-question four:

*What impact do different governance trajectories have on the overall performance?*

In the following sub-sections the governance combinations across the three project phases are presented and the paths of these combinations investigated.

5.3.1 **Governance combinations across project phases**

Here, the results of the governance combinations across the three distinct project phases: bid/contract negotiation, build and operate, and their impact on overall performance are explored. In other words, whilst in the previous sections the range and combined score of governance interplays for different events and event types were investigated, the following sub-sections examine governance combinations across the three project phases. Individual events can be recognised by their unique event identifier, as explained in Chapter Four: Case Findings. For instance, event E2 represents the second event identified in the Gloucestershire Fire and Rescue Service case.
### Contractual governance

<table>
<thead>
<tr>
<th>Relational governance</th>
<th>16%</th>
<th>84%</th>
<th>16%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>E2</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>8%</td>
</tr>
<tr>
<td></td>
<td>M</td>
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<td></td>
<td>E1</td>
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<td></td>
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<td>F1</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>M</td>
<td>H</td>
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</tbody>
</table>

**Legend:** Event identifier, e.g. A1 – 1. event in the Swindon Hospital case

**Figure 41** Governance combinations - bid/contract negotiation phase

Figure 41 illustrates the governance combinations across the investigated cases in the bid/contract negotiation phase. As can be seen, contractual governance was of high significance (84%) during the bid/contract negotiation phase and was mostly reported as being used in combination with low (42%) or medium (34%) significance of relational governance. Better performing cases, such as Kirklees Waste Management (C) and Gloucestershire Fire and Rescue Service (E), emphasised the significance of relational governance mechanisms during the early project phase. In this regard, both these cases held informal meetings and developed a boundary-spanning relationship to overcome relationship problems in the early phase. The establishment of such relational governance in the early bid/contract negotiation phase resulted in a reduction in the contract negotiation time and costs. Relationship problems that did occur, such as site search, were mostly resolved using existing inter-personal relationships. In contrast, worse performing cases emphasised the establishment of complete contracts, leading to lengthy contract negotiations that included discussions about limits on liability and payment mechanisms.
Figure 42  Governance combinations - build phase

Figure 42 illustrates the governance combinations across the investigated cases in the build phase. This phase is characterised by a high degree of contractual governance emphasis. Only a minority of the events (24%) show a balanced governance approach (medium/medium) and all three of these events occurred in the better performing cases. The great majority (68%) were events with high contractual governance combined with low (34%) or medium (34%) significance of relational governance. Having gone through lengthy contract negotiations, the subsequent build phase was mostly typified by high emphasis of contractual governance in the worse performing case. Better performing cases deployed a more balanced governance approach with medium relational and medium to high contractual governance significance.
Figure 43  Governance combinations - operate phase

Figure 43 depicts the governance combinations across the investigated cases in the operate phase. Regarding this phase a more balanced approach towards governance combinations covering a wider spectrum of combinations can be seen. It can also be observed that the better performing cases (as indicated by event identifiers C, E and F) had more events with a high emphasis on relational governance (25%). Although the governance combination of high contractual governance combined with low relational governance emerged as still being predominant, other governance combinations were deployed for governing events in this phase. This is, because in some instances the partnering organisations were able to observe each others’ goodwill during the previous project phases and subsequently this enhanced relational governance. However, periodic contract renegotiations, mainly benchmarking exercises, and severe operational problems being encountered during the operate phase, led these organisations to revert to placing greater emphasis on contractual governance.

Table 20 and Figure 44 summarise the development of governance combinations across the three project phases: bid/contract negotiation, build and operate.
Table 20  Governance combinations across the project phases

Figure 44 illustrates the governance combination changes across the project phases.

Table 20 and Figure 44 illustrate the changes in governance combinations across the project phases and it shows that six contractual and relational governance combinations were employed. Only limited changes occurred in these combinations during the first two project phases (bid/contract negotiation and build). That is, Figure 44 shows that contractual governance was of high significance in combination with low and medium significance of relational governance. In contrast, during the transition from the build to operate phase substantial changes in the governance
combinations occurred. Although contractual governance was still of high and medium significance, that of relational governance increased in the operate phase when compared with the previous two phases. In sum, it would appear from these observations that contractual governance moves with a smaller degree of freedom and its significance decreases only marginally across project. Moreover, the use of contractual governance was not of low significance during any the project phases in the events covered. In contrast, relational governance significance marginally decreased from the bid/contract negotiation to the build phase, but increased from the build to the operate phase.

Figures 45 and 46 below, display the changes in governance combination changes across the phases for the better and worse performing cases, respectively.

**Figure 45** Distribution and changes of governance combinations across project phases in better performing cases

Regarding the better performing cases (Kirklees Waste Management, Gloucestershire Fire and Rescue Service and South Wales Fire and Rescue Service), the above figure shows that they employed a wider spectrum of governance combinations than the worse performing cases, as shown in Figure 46. The findings across the investigated cases suggest that better performing projects apply a range of governance combinations and tend to move across the governance combinations more easily. In
other words, these cases apply contractual and relational levers in response to various events.

Further, in these cases five contractual and relational governance combinations were reported, with governance regarding the majority of the events centred around high significance of contractual governance combined with low, medium or high significance of relational governance. With regards to the different phases, contractual governance is of high significance in combination with low to medium significance of relational governance during the bidding and contract negotiation phase of the project. The significance of relational governance increased during the build and operate phases, as the three investigated cases began to exhibit more proactive approaches in the building up of relational governance through, for instance, regular meetings and mutual investments, such as the visitor and education centre in the Kirklees Waste Management case. As a result of these positive attempts to build inter-personal relationships information exchange was facilitated across the partnering organisations.

**Figure 46** Distribution and changes of governance combinations across project phases in the worse performing cases

Figure 46 shows that for the worse performing cases (Swindon Hospital, Oxford Hospital, Surrey Waste Management) three governance combinations across the project phases were predominant. Contractual governance is of high significance in
combination with low to medium significance of relational governance throughout the project phases. All three of these cases exhibited limited proactive approaches towards building up relational governance through, for instance, informal meetings that would facilitate information exchange across the partnering organisations. However, the ‘relationship away-day’ and ‘team co-location’ events in the Swindon Hospital and the Oxford Hospital cases illustrate that attempts were made to build relational governance. In this respect, both of these events were governed by a medium significance of contractual and relational governance. Notwithstanding this, there were few other attempts to proactively build relational governance in the worse performing cases.

5.3.2 Paths of governance combinations

From the results it has been concluded that six governance combinations were deployed at various event types across the investigated cases. The following figures illustrate the paths of the six empirically observed governance combinations.

![Governance combination A](image)

*Legend: 2/13 – two events out of thirteen identified for this governance combination*

**Figure 47** Governance combination A

Figure 47 illustrates the paths for the governance combination of high contractual governance combined with low relational governance and thirteen events were identified which followed this governance combination. More than half of the succeeding events employed a governance combination characterised by high
contractual governance combined with medium significance of relational governance. Moreover, high contractual governance was found in more than 80% of the follow up events. Two events experienced a significance change in both the contractual and relational governance mechanisms.

**Figure 48** Governance combination B

Figure 48 shows the paths for the governance combination of high contractual governance combined with medium relational governance and ten events were identified which followed this governance combination. Almost half of the succeeding events employed a governance combination typified by high contractual governance combined with low significance of relational governance. Moreover, high contractual governance was found in 60% of the follow up events.
Relational governance

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Contractual governance

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Figure 49  Governance combination C

Figure 49 depicts the paths for the governance combination of high contractual governance combined with high relational governance and only two events were identified that followed this governance combination. This governance combination provided the only situation where when a subsequent event was observed its governance combination moved beyond the neighbouring boxes. That is, in this case the succeeding event was governed by high contractual governance combined with low relational governance.

Figure 50  Governance combination D

Figure 50 illustrates the paths for the governance combination of medium contractual governance combined with low relational governance and two events were identified
that followed this governance combination. In both occurrences the subsequent event was governed by high contractual governance combined with low relational governance.

<table>
<thead>
<tr>
<th>Relational governance</th>
<th>Contractual governance</th>
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<tbody>
<tr>
<td>H</td>
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<td>M</td>
<td>2/5</td>
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<tr>
<td>L</td>
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Figure 51  Governance combination E

Figure 51 displays the paths for the governance combination of medium contractual governance combined with medium relational governance and five events were identified which followed this governance combination. No follow up event deployed the previous event’s governance combination and 80% of the succeeding events deployed high contractual governance.
### Figure 52  Governance combination F

Figure 52 shows the paths for the governance combination of medium contractual governance combined with high relational governance and two events were identified which followed this governance combination. Both succeeding events were governed by a governance combination characterised by high contractual governance.

In conclusion, the illustrations above depict the paths of the six observed governance combinations. The substantial majority of these governance combinations moved to one of the neighbouring governance combinations, during a subsequent event. Only one succeeding event was observed where the governance combination moved beyond the neighbouring boxes. Moreover, for the majority of governance combinations only one of the governance mechanisms changed for a subsequent event and not both at the same time. In a small minority of cases the governance combinations stayed the same as for the previous event. Hence, whilst there are incremental movements in governance combinations across the project phases, they appear to move with limited degrees of freedom and are restricted by the governance combinations deployed for the preceding event.
5.4 Chapter Summary

This chapter has presented the cross-case analysis for the investigated cases, by addressing the four research sub-questions. In the following chapter the results of the investigated cases as exhibited in Chapters Four and Five are discussed. In particular, the central research question and the constituent research sub-questions are examined by drawing upon the outcomes of case study analysis, and then the conceptual framework is re-visited.
CHAPTER SIX: DISCUSSION

Introduction to Chapter

This chapter reconciles the within-case and cross-case analysis results to the literature and the conceptual framework. The chapter returns to the central research question and constituent research sub-questions. Sections 6.1.1 and 6.1.2 address the roles of contractual and relational governance in supply arrangements over time. The following sections 6.1.3 and 6.1.4 return to research sub-questions three and four by investigating governance combinations at different points in time and by illustrating the impact of different governance trajectories on the overall performance. Subsequently, in section 6.2 a revised conceptual framework, which incorporates the refinements, is presented based on the analysis and of the case findings.

6.1 Responses to the Research Questions

This research has set out to answer the following central research question:

What are the dynamics of contractual and relational governance mechanisms in supply arrangements?

In order to answer this central research question, the research sub-questions are addressed successively.

Research sub-question one:

What is the role of contractual governance in supply arrangements over time?

Research sub-question two:

What is the role of relational governance in supply arrangements over time?

Research sub-question three:

What are the governance combinations at different points in time?

Research sub-question four:

What impact do different governance trajectories have on the overall performance?
6.1.1 Research sub-question one

The analysis has revealed a set of answers to the research sub-questions by compiling evidence from the investigated case. The following sub-sections explain the role of complex and intermediate contracts in supply arrangements, thereby addressing research sub-question one.

Bespoke and standard contracts

Early public-private projects across different sectors experienced a prolonged bidding and contracting negotiation phase, as standard contracts had not yet been drawn up by the respective public authorities. Later projects relied upon standard contracts, resulting in marginally reduced contract negotiation periods. These standard contracts were derived from earlier public-private projects through the identification of common clauses and terms which were used in these bespoke contracts. Contracting parties in later projects deployed standard contracts as a mutually agreed basis for further lengthy contract negotiations to ensure contract completeness. Moreover, the contracting organisations in early and later projects aimed to structure complex contracts so as to protect the relationship against opportunistic behaviour by the partnering organisation, by relying upon legal rules, standards and remedies implied in the law (Achrol and Gundlach, 1999). That is, the standard contract was merely considered a common starting point for subsequent contract negotiation. This observation is further supported by contract complexity as explained in the following sub-section.

Contract complexity and incompleteness

The case study findings illustrate that project agreements comprise extensive and detailed contracts with legal safeguards and enforcements while at the same time lacking appropriate specifications. In accordance with the findings of Lyons and Mehta (1997), the organisations involved aimed for a high degree of contractual precision and clarity in the agreements, resulting in contracts that contain hundreds of pages and a multitude of schedules and procedures. In addition, as proposed by Poppo and Zenger (2002), it was found that the long-term nature of the arrangements seemed to encourage drafting complex contracts by defining remedies for foreseeable contingencies or installing procedures for resolving unforeseeable
outcomes. Further, the contracting parties aimed for a high degree of contract completeness including terms that describe obligations of parties for many future contingencies and providing penalties for undesired behaviour. For instance, the contract in the Surrey Waste Management case contains clauses which specify penalties for people operating waste treatment plants, such as fines for smoking on site.

The long-term nature of the project was underpinned by regular, contractually stipulated contract redrafting and renegotiation periods throughout the project. This observation is supported by the findings from the Oxford Hospital case, where a standard contract was only deployed as a common starting point for further negotiations. Both partnering organisations in this case invested several months in customising the standard contract to include additional contractual safeguards. These safeguards contain terms and procedures regulating, for instance, warranties and liabilities, employment and TUPE (Transfer of Undertaking Protection of Employment) regulations and information and audit access. However, the contracts provide limited specifications and guidance in the event of operational problems, for example. Moreover, whilst the contracts offer regulations regarding, for instance, penalising providers for non-compliance with contractually agreed service levels, they offer limited guidance in resolving relationship problems.

Case findings, such as the ‘portering problems’ event in the Oxford Hospital case, illustrate that non-specification of responsibilities and guidelines may elevate operational problems, leading to mutual blaming behaviour and disruptive service delivery. In fact, the early operate phase of the Oxford Hospital was characterised by severe operational problems. In this regard, having set out various performance targets regarding the service delivery during the bid/contract negotiation phase, service performance dropped below the contractually stipulated threshold during the first few months of the hospital’s operate phase. In this case, the facilities management division of the supplier is contractually obliged to deliver more than 99% service efficiency for portering services, such as answering calls at the hospital’s helpdesk. The number of available porters at any given time was calculated during the bid/contract negotiation phase. These calculations were based on scant data taken from the NHS Trust and the supplier's experience gained from
similar PFI hospital projects and the forecast was for around 9,000 calls a month. However, at the time of the case study the hospital’s helpdesk was receiving around 25,000 calls a month and as a result the hospital’s service levels dropped below the contractually stipulated threshold. This operational problem led to mutual blaming behaviour and lengthy disputes about both parties’ responsibility for the suboptimal service delivery. Subsequently, they engaged in prolonged contract renegotiations to set out new service performance levels and to discuss the distribution of additional costs in hiring more porters.

Organisations across the cases aimed to ensure contract completeness, as incomplete contracts could lead to ambiguity in relationships and raising the likelihood of conflict, thereby hindering the ability to coordinate activities and resources. In contrast to the assertion that incomplete contracts may lead to relationship ambiguity (Goldberg, 1976), it was found that contractual incompleteness may foster inter-organisational relationships and facilitate a bilateral approach to problem solving. For example, during the late build and early operate phase of the Gloucestershire Fire and Rescue Service case, the operational problem of including an additional staircase in the training centre was resolved through inter-personal relationships. That is, the complex contract offered limited guidance on specific relationship problems as, for instance, the issue of an additional staircase was not part of the initial planning. Consequently, both parties referred to the previously set up working agreement, the intermediate contract, and the established inter-personal relationship between two boundary-spanning individuals. Subsequently, the additional staircase was then written into the working agreement as an additional expense and only added to the complex contract during later contract negotiations. The Gloucestershire Fire and Rescue Service case shows that inter-personal relationships established at the outset of the relationship can offer a flexible approach where there is contractual incompleteness.

Despite the extended contract negotiation processes involved in every case, the large number of subsequent contract variations suggests that no matter how many resources contracting parties invest in the drafting process, any contract in such a complex exchange remains incomplete. For instance, the three years build phase in the Swindon Hospital case was characterised by over 400 contract variations. In fact,
contractual incompleteness and a myriad of subsequent revisions were also observed where standard contracts were deployed. Consistent with the view of Williamson (1985, 1991), it emerged that the organisations aimed to align the governance feature of inter-organisational relationships to match known exchange hazards on an ongoing basis.

After exploring the motivations for contractual completeness through applying different frames and levels of analysis, a number of explanations emerged. For example, as these involved public procurement processes, there were numerous local, national and European regulatory issues that necessitated formal documentation. In addition to significant design and service specifications and financial and organisational structures complexity, the contracting process in the early cases had to accommodate a nascent supply market and the uncertainties introduced by monitoring and enforcing contracts over extended timeframes. High transactions costs resulting from contract complexity together with the exchange-specific investments that led to bilateral dependencies in the results confirmed Carney’s (1998) research outcomes. This situation created a context where the potential for opportunism increased the likelihood that all parties would engage in difficult and expensive contracting, which is consistent with the findings of Holcomb and Hitt (2007).

In the following sub-sections the operationalisation of complex and intermediate contracts is investigated.

Operationalisation of complex and intermediate contracts

The analysis illustrates that individuals encountered difficulties in operationalising the complex contract. These difficulties stemmed from the complexity of the contract, containing hundreds of schedules and procedures, and the large number of further contract renegotiations during the subsequent build and operate phase. In general, the vast majority of contract renegotiations result in excessively detailed contracts which are inflexible to monitor and operationalise. Therefore, the public partner in the Gloucestershire Fire and Rescue Service aimed to counteract the problems of complex contracts by producing a shortened working agreement for use in day-to-day operations. This intermediate contract represented a condensed version
of the complex contract, containing the most frequently used contract terms and schedules. It offered managers of the training centre access to the necessary contract terms and clauses more promptly.

The ‘additional staircase’ event in the Gloucestershire Fire and Rescue Service case illustrates the incompleteness of the complex contract as no formal, contractually agreed procedures were in place for this event. So the event was resolved through deploying the intermediate contract and inter-personal relationships between both partners’ personnel. That is, in this instance unforeseeable contingencies were safeguarded by flexibility, a bilateral approach to problem solving, solidarity and information sharing which facilitated adaptations within the exchange relationships, which matched the findings of Klein Woolthuis et al. (2005). The terms and conditions regarding the staircase were then added to the intermediate contract and only incorporated in the initial complex contract during later contract renegotiations. Moreover, information sharing, as exercised by two boundary-spanning individuals, helped to overcome relationship problems in the early project phases.

The research findings revealed that the long-term contracts involved in public-private relationships alter the future projections regarding work in organisations and teams. In this respect, the contracting parties are encouraged to consider how contractually specified terms and procedures will play out over an extended project life cycle of up to 30 years. Additionally, it was found that contractual terms are highly descriptive regarding the adopted time perspective with greater importance being placed upon schedules, tasks and procedures. Furthermore, contracts support long-term and rigid time orientation in such complex projects which is also reflected in the extended period of feedback loops in the context of contractual governance mechanisms. For instance, contract variations can take three to four months to be formalised as they have to be approved by various project stakeholders, such as banks and technical advisors.

This long-term time orientation inherent in such contracts works against the day-to-day operations performed by individuals and teams in contracting organisations. Hence, these contracts do not sufficiently take into consideration the ‘plurality’ of times in these complex relationships. In other words, whilst contractual governance prescribes a more rigid, long-term time orientation, organisational teams involved in
day-to-day operations work within a more flexible, short-term oriented timeframe. For instance, applying contractually stipulated procedures for the ‘gritting car park’ event in the Swindon Hospital elevated the seriousness of the issue and delayed the solution of this operational problem. That is, both parties strictly followed procedures as set out in the contract, involving lengthy contract renegotiations and clarification of partners’ responsibilities for the car park’s service availability levels. In contrast, a more flexible approach to relationship problems that deploys relational governance mechanisms, especially by boundary-spanning individuals, may shorten the time of the solution finding phase.

The nature of the PFI arrangements investigated meant that contract renegotiations were contractually stipulated to take place at regular intervals and they prescribed (semi-) annual renegotiation intervals. Thus, the contract was viewed as a time-bound artefact of the relationship to be updated in regular, contractually prescribed intervals. In addition, it was found that contract renegotiations are put in place to give contracting parties a regular basis to address variations in the internal or external project environment aspects of the contract. For example, the impact of changed waste regulations on the Kirklees Waste Management project needed to be reflected in the contract, by adjusting penalties for non-compliance based on new recycling levels. However, contracting parties in the worse performing cases emerged as having the aim of countering these prescribed renegotiation intervals, by seeking to incorporate contract variations on an ongoing basis. In this regard, it emerged that this behaviour led to a more accurate reflection of the evolving relationship, but suffered from high transaction costs and highly specified contracts. Ongoing contract variations were especially pronounced during early relationship phases when there were limited inter-personal relationships and the contracting parties relied predominantly on complex contracts to resolve relationship problems.

Findings from all the cases indicate how contractual governance, manifested in the form of complex contracts, is built up over various stages of the relationship life cycle: from official tendering documents via the contract negotiation phase to the multiple variations that are subsequently incorporated. Moreover, findings also show that once a complex contract was constructed it tended to evolve in an incremental fashion. That means, even very regular changes and adaptations did not, indeed
arguably could not, shift the overall governance trajectory and similarly, these contracts did not easily ‘erode’ over time. In this context, all cases exhibited medium to high significance of contractual governance throughout their inter-organisational relationships. Reflecting in part the exogenous factors at work, especially in PPP/PFI arrangements which are heavily constrained by national and EU regulations, it is nonetheless clear that such a ‘constrained’ developmental trajectory works to ‘anchor’ the exchange throughout its life cycle.

More fundamentally, the empirical research suggests that complex contracts actually exhibit a form of path dependency. That is, the sequence of past events matters for future events and decisions relating to any given circumstance are determined by decisions made in the past (David, 2000). Contractual governance, in form of complex contracts, is built up over various stages, ranging from official tendering documents during the contract negotiation phase to the contract variations that are incorporated across the relationship life cycle. Moreover, reverting the course of contractual governance, once established during the course of the bid/contract negotiation phase, is time- and cost-consuming as it leads to lengthy renegotiation processes involving a number of project stakeholders such as banks and consultants. Previously stipulated contract terms such as performance measures of service availability, rectification of service unavailability and performance monitoring procedures remained constant and were only slightly amended throughout the relationship life cycle. For instance, the Oxford Hospital case demonstrates that misspecification of service delivery measures such as the necessary number of porters and their task specifications led to lengthy and cost-consuming renegotiations between the private and public organisation. The results of the studied cases show that parties invest substantial resources at the outset of the relationship to establish complex tendering documents which form the initial documents for setting up a complex contract during the bid/contract negotiation phase. In addition, the bid/contract negotiation phase is characterised by extensive contract negotiations spanning a period of a few months. During subsequent project phases, the complex contract was further changed as shown by the myriad of contract variations. Contractually stipulated contract variations took place in prescribed time intervals ranging from every six or twelve months during the build and operate phases. This
sequence of stages, from tendering documents to a complex contract, was evident across the investigated cases, prescribing the path dependency of complex contracts.

6.1.2 Research sub-question two

Having investigated the role of contractual governance mechanisms in supply arrangements, the following sub-sections investigate the role of relational governance mechanisms in such supply arrangements by considering inter-organisational and inter-personal trust levels.

Inter-organisational and inter-personal trust levels

As the above discussion has highlighted, although, the development of relationships in the investigated cases was substantially influenced by the structures of contractual governance, the importance of relational governance was also clearly evident. As evidenced in the work of MacNeil (1980), the case findings have illustrated that relational governance emerged from the shared values and the processes agreed upon in the exchange relationship. The analysis has also revealed that relational governance was based on trust and commitment, which is consistent with Lui and Ngo’s (2004) findings and information sharing routines among individuals from the partnering organisations, which was identified to be the case by Poppo et al. (2008).

Moreover, in accordance with Koppenjan’s (2005) research it was found that organisations interacting in early project phases may develop a shared understanding and mutual trust on an individual and organisational level, thus positively impacting on contract negotiations. However, it emerged that the public procurement process, which included extensive regulatory frameworks, hampered the formation of inter-organisational trust and thereby led to a pronounced emphasis on contractual governance mechanisms in most cases.

Establishing inter-personal relationships across partnering organisations, so as to overcome difficulties in the early more vulnerable project phases, yielded positive relationship effects. For instance, the evidence from the Gloucestershire Fire and Rescue Service and Kirklees Waste Management cases suggests that inter-personal trust can facilitate the negotiation and drafting of complex contracts. In this regard, the formation of inter-personal relationships in the former case facilitated the site
search during the early project phase. Not only did the private partner support the public partner in finding an appropriate site for the training facility, but it also helped in the planning of future training needs during the bid/negotiation phase. Intriguingly there is evidence of a link between inter-personal relationships, as exercised by boundary-spanning individuals, and contract drafting. In this regard, in the Gloucestershire Fire and Rescue Service case the contracting process was interpreted by both parties as a tangible expression of the openness and psychological safety that had already been built up between individuals and organisations, which was consisting with Edmundson’s (1999) research findings. Although this contract involved substantial bi-lateral investment, the explicit attempts to develop trust in the early phases of this case were felt on both sides to have significantly helped with sensitive issues, such as benefit sharing and relationship termination procedures. In other words, the boundary-spanning relationships facilitated the exchange of sensitive, proprietary information across the contracting parties.

In contrast, cases with limited inter-personal trust, such as the Swindon Hospital case, experienced negative effects from the long-term contract negotiation process, which resulted in distrusting behaviour among the contracting parties. The relationship between the public and private organisations in this case was typified by an aggressive contract approach and mutual blaming behaviour for the prolonged site search. As evidenced in the Gloucestershire Fire and Rescue Service case and consistent with Macneil’s (1978) findings, when boundary-spanning individuals develop strong inter-personal relationships, this promotes norms of: flexibility, solidarity and reciprocity. Moreover, in this particular case the inter-personal relationship developed at the outset of the relationship was not sanctioned through contractual governance, but reliant on the boundary-spanning individuals’ goodwill and reciprocity, which supports Zaheer et al.’s (1998) research outcomes. In fact there were limited contractually stipulated procedures in place to facilitate the formation of inter-personal relationships at the outset.

Furthermore, boundary-spanning individuals from both partnering organisations built up a trusting inter-personal relationship characterised by information flow. However, trusting relationships on an inter-personal level did not transpire at the inter-organisational level in this case as the boundary-spanning relationship was lost after
one of the individuals left the project. This team change during the early build phase resulted in relationships that were typified by less frequent information exchange and limited joint working towards solving relationship problems. However, over time the new personnel from both organisations built up trusting inter-personal relationships. Ongoing interactions, such as regular meetings between individuals of both organisations, also helped to establish an intermediate contract.

The Kirklees Waste Management case shows that established inter-personal relationships can positively impact on an inter-organisational level. In contrast to the Gloucestershire Fire and Rescue Service case, the results in this case are consistent with those of Poppo and Zenger (2002) in that when there are expectations of relationship continuity and longevity, this can generate incentives to invest in exchange-specific investments, such as the visitor and education centre developed through this partnership. Individuals from both partnering organisations’ teams established friendly relationships with their counterparts throughout the early project phases. Consequently, individuals in this case had the opportunity from the beginning to observe and test their counterpart’s willingness and commitment to the long-term relationship. The visitor and education centre project was not set out in the initial contract, but was felt by both parties as being vital to increase awareness of waste and recycling issues in the council area.

Conversely, relationships in the Swindon Hospital and Surrey Waste Management cases, in particular during the bid/contract negotiation and early build phases, exhibited low levels of trust. In these cases, the divergent values and strategies of the public buyer and private supplier strongly influenced both contractual negotiations and subsequent performance management. As a result, these early project phases were characterised by ineffective information flow across the partnering organisations and an absence of personal bonding and routinised behaviour. These cases confirmed Ghoshal and Moran’s (1996) view that distrust evokes opportunistic behaviour and may lead to a lack of loyalty, hence increasing the need for formal control. The findings in the two aforementioned cases exemplify that distrust, in form of mutual blaming and limited information exchange, leads to escalation of the of operational problems in the relationship.
Informal meetings or inter-personal relationships can facilitate a timely solution to relationship problems. For instance, operational problems as observed in the Gloucestershire Fire and Rescue Service’s ‘additional staircase’ event could be resolved in a timely manner by applying a balanced governance combination. Whilst in such situations contractual governance may function as a mere ‘framing device’ to resolve operational problems, the use of relational governance can add the necessary flexibility to resolve operational problems. In this particular case, contractually stipulated guidance to resolve relationship issues was applied in combination with relational mechanisms to overcome contract incompleteness.

The case findings support the assumption that the trajectories of complex contracts and inter-personal trust have different development characteristics. With regard to the latter, evidence emerged that although relational governance based upon inter-personal trust follows an incremental and cumulative trajectory, there is the capability for it to be rapidly diminished. The following described process and the given example illustrates this. Inter-personal trust, as exercised by boundary-spanning individuals across organisations, is build up gradually over time by observing and testing each other’s goodwill and commitment. For instance, various events such as informal meetings and social gatherings after work helped to build up inter-personal trust between two boundary-spanning individuals in the Gloucestershire Fire and Rescue Service case. Having observed each other’s goodwill over time, both individuals were crucial to the overall relationship during the bid/contract negotiation phase. Both of these people facilitated the exchange of relationship-specific information and proposed solutions to relationship problems outside the contractual framework. However, in this case the inter-personal trust quickly disappeared after the boundary-spanning individual from the private supplier left the project.

Further findings, such as the ‘relationship away-day’ event in the Swindon Hospital case, show that inter-personal trust needs to be build up over time and cannot be achieved by a single event. In this regard, although the ‘relationship away-day’ event facilitated the exchange of relationship-specific information, it did not lead to the formation of boundary-spanning relationships as limited follow up events were initiated. This would indicate that inter-personal trust needs to be built up and
nurtured over time by events, such as regular informal meetings or social events outside the work place.

Araujo and Harrison (2002) argue that past events are important for determining the state of future events, but their specific sequence and temporal unfolding will not necessarily follow one particular path or trajectory and this was found to be so in the researched cases. Therefore, the trajectory of inter-personal trust can be described as past dependent and in other words history matters when developing inter-personal trust. The trajectory of inter-personal trust does not follow a particular trajectory across the investigated cases, but is influenced by past events. For instance, the formation of inter-personal trust between the two boundary-spanning individuals in the Gloucestershire Fire and Rescue Service case, described above, did not follow a specific sequence of events, but a mix of events such as informal meetings over a period of time, where both individuals were able to observe each other’s commitment to the relationship. Different development trajectories of inter-personal trust were observed across the researched cases. The trajectory of inter-personal trust in the Gloucestershire Fire and Rescue Service case exhibits a high speed with which inter-personal trust was formed through boundary-spanning individuals exchanging relationship-specific information. In contrast, the trajectory of inter-personal trust in the Swindon Hospital case illustrates a slow development of inter-personal trust characterised by phases of weakened inter-personal trust.

Relative investments and payback

A potential dilemma of using relational governance to sanction behaviour is that its development and maintenance may be time- and resource-consuming (Larson, 1992). The case findings support this assertion showing that pro-active investments, in the forms of regular meetings or team co-location, are needed in order to facilitate the formation of and to nurture relational governance. However, the expenditure of the partnering organisations on the formation of complex contracts during the early project phases and subsequent contract variations, throughout the relationship, was considerably higher than investments in the development of relational governance.

The evidence shows that building up inter-personal relationships at the outset of the joint project led to higher levels of flexibility in contract interpretation during the
later project stages. For instance, inter-personal relationships in the Gloucestershire Fire and Rescue Service case as developed by the two boundary-spanning individuals facilitated a flexible approach towards solving operational problems during the later project phases. Instead of referring to the contract and following contractual procedures and guidelines to penalise the service provider for disrupted service delivery, the buyer deployed relational governance mechanisms to solve operational problems. This shows that investments in inter-personal relationships during the early project phases proved essential to overcome relationship difficulties that occurred in the later stages.

In contrast, the contracting parties in the Swindon Hospital and Oxford Hospital cases, tended to deploy contractual procedures and penalties to overcome operational problems that occurred at later project stages, because limited investment in relational governance mechanisms had been committed to at the outset of the relationship. This approach led to prolonged discussions characterised by mutual blaming behaviour and limited information sharing. Exploration of the motivations for this limited investment in relational governance mechanisms at the outset of the relationship revealed two main reasons. First, the divergent values of the public buyer and private supplier hindered the effective formation of relational governance mechanisms during the inception of the partnership. The research findings were consistent with those of Grimshaw et al. (2002), in that the difficulties in undertaking an effective application of relational governance mechanisms in long-term public-private relationships was further complicated by a power imbalance across the partnering organisations. Furthermore, as proposed by Teisman and Klijn (2004), different values and strategies between the private and public sector were found to be employed in these contract negotiations. In this regard, the case study findings support the view that whilst the private supplier aimed for high commercial returns from the project, the public buyer aimed to ensure the best possible service delivery. Second, it emerged that a public procurement process typified by prescriptive regulatory frameworks necessitates formal negotiation processes, resulting in complex contracts. Moreover, early project phases characterised by distrust led to a high emphasis on complex contracts combined with limited formation of inter-personal or inter-organisational trust.
The case findings also suggest that public sector learning and capability development appears to be limited to individual projects. That is, while private suppliers are involved in a number of public-private procurement projects within the same sector and increasingly across sectors, public buyers, such as an NHS Trust, will only procure a single PFI project. Therefore, private suppliers are able to benefit from inter-project learning and flexible project teams moving across projects. In contrast, individuals in public organisations are likely to be involved in the procurement of only a single public-private project during their working life and under such circumstances established learning capabilities are not usually passed on to other projects. To counteract the limited information sharing across projects in the public sector, government policy units, for instance the Private Finance Unit (PFU) for the healthcare sector, were established to assist later PFI projects in collecting information and for providing centralised project guidance to public buyers. Moreover, as the two Fire and Rescue Service cases for this research have illustrated, informal and uncoordinated learning may take place between public buyers. The later procured South Wales Fire and Rescue Service project benefited from information that an individual involved in the earlier project passed on to it. However, in most of the cases knowledge asymmetry between both public and private organisations at the outset of the relationship led to the inclination to rely heavily on contractual governance mechanisms as a common language during the bid/contract negotiation phase.

6.1.3 Research sub-question three

A brief return to the different events and their combinations provides the starting point for answering research sub-question three. This sub-section also discusses the characteristics of the different event types across the project phases and the impact of these on governance combinations.

Characteristics of event types

In order to answer research sub-question three, different events were investigated along the project phases. Moreover, the respondents were asked to describe the use of contractual and relational governance mechanisms at each of the identified events.
This collected data was collated with firm documents and government reports. Table 21 summarises the eight different event types and their characteristics.

<table>
<thead>
<tr>
<th>Event type</th>
<th>Initiative (endogenous - buyer, supplier; exogenous)</th>
<th>Project phase</th>
<th>Impact on governance combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team change</td>
<td>Endogenous – buyer, supplier</td>
<td>Mainly early build phase; operate phase</td>
<td>Increase contractual governance; decrease relational governance</td>
</tr>
<tr>
<td>Mutual investment</td>
<td>Endogenous - buyer, supplier (jointly)</td>
<td>Operate phase</td>
<td>Decrease contractual governance, increase relational governance</td>
</tr>
<tr>
<td>Regular meetings</td>
<td>Endogenous - buyer, supplier</td>
<td>Bid/contract; build phase</td>
<td>Decrease or steady contractual governance, increase or steady relational governance</td>
</tr>
<tr>
<td>External change</td>
<td>Exogenous</td>
<td>Operate phase</td>
<td>Increase contractual and steady relational governance</td>
</tr>
<tr>
<td>Seminar</td>
<td>Endogenous - supplier</td>
<td>Bid/contract; operate phase</td>
<td>Decrease or steady contractual governance; increase or steady relational governance</td>
</tr>
<tr>
<td>Team co-location</td>
<td>Endogenous - buyer, supplier</td>
<td>Early build phase</td>
<td>Steady contractual governance; increase relational governance</td>
</tr>
<tr>
<td>Operational problem</td>
<td>Exogenous; endogenous – buyer</td>
<td>Mainly operate phase</td>
<td>Increase (or decrease) contractual governance; decrease (or increase) relational governance</td>
</tr>
<tr>
<td>Contracting work</td>
<td>Endogenous - buyer, supplier; exogenous</td>
<td>Bid/contract; build; operate phases</td>
<td>Increase or steady contractual governance, decrease (or increase; steady) relational governance</td>
</tr>
</tbody>
</table>

Table 21  Event types and characteristics

The following sub-sections discuss the event type characteristics, as shown under the headings: event type initiative, project phase and impact on governance combination in Table 21.

Event type initiatives across project phases

Event types are categorised under the source of initiative, which are distinguished as exogenous initiatives, i.e. those originating from outside the dyadic relationship, and endogenous initiatives, i.e. those proceeding from within the dyadic relationship. The majority of event types originated from within the relationship initiated by either the supplier or buyer organisation or both organisations together. Event types are also categorised by their occurrence across the three different project phases: bid/contract negotiation, build and operate phase. Whilst the bid/contract negotiation phase was mainly characterised by event types, such as: ‘regular meetings’, ‘contracting work’ and ‘seminar’, the event types: ‘team change’, ‘regular meetings’, ‘contracting work’ and ‘team co-location’ occurred during the build phase. During the operate phase, event types: ‘operational problem’, ‘mutual investment’, ‘external change’,
‘contracting work’ and ‘seminar’ predominantly took place. The following subsections explain individual event types’ sources of initiative and their occurrence across the project phases.

Events grouped under event type ‘team change’ were initiated by either the supplier or the buyer. Moreover, team changes mostly occurred at breaking points between project phases, such as the move from the bid/contract negotiation to the build phase. For instance, the supplier team change in the Gloucestershire Fire and Rescue Service case occurred at the outset of the build phase and resulted in a complete breakdown of inter-personal trust. That is, previously built up relationships between boundary-spanning individuals were obsolete after the initial supplier team was replaced by the construction team, leading to arm’s-length relationships typified by limited information sharing across the organisations. Similarly, the public buyer team changed at the outset of the build phase in the Surrey Waste Management case. Recurring changes in the public team during the early build phase in both of these cases hindered the formation of inter-personal relationships and the establishment of clear reporting and communication lines between both organisations. Team changes also took place during the operate phase as illustrated in the South Wales Fire and Rescue Service case. This particular team change was initiated by the buyer after experiencing a low level of 3rd party income generation. In this case the team change was initiated to install a more experienced, non-uniformed liaison manager who would be responsible for increasing income for the training centre.

The event type ‘mutual investment’ was only observed in the Kirklees Waste Management case, this being during the operate phase. It was jointly initiated by both partnering organisations, reflecting a relationship characterised by a high degree of information sharing and joint working across the phases. Both partners were able to observe the other’s goodwill and commitment during the bid/contract negotiation and build phase. As a result, both parties worked together to set up a visitor and education centre during the outset of the operate phase. Moreover, this centre was established outside the initially negotiated contract and interviewees from both organisations emphasised that ongoing, positive relationships were vital in establishing this mutual investment.
The event type ‘regular meetings’ was initiated by either the buyer or supplier during the bid/contract negotiation or build phase. Regular meetings during the bid/contract negotiation phase were used to clarify each other’s objectives and expectations and to facilitate the formation of inter-personal relationships among the personnel of both partnering organisations. That is, regular meetings facilitated contract negotiation in the earlier project phases. In the Kirklees Waste Management and South Wales Fire and Rescue Service cases, the regular meetings event was deployed during the build phase to exchange relationship-specific information across the organisations and to resolve any problems that occurred. Moreover, this mostly involved face-to-face communications between senior personnel in both organisations, on a weekly or monthly basis.

‘External change’ occurred during the operate phase in the Kirklees Waste Management case. In this context, government landfill regulations regarding recycling targets were strengthened, thereby impacting negatively on the existing technology deployed in the Energy from Waste (EfW) plant in this project. Having previously met and exceeded the government’s initial recycling targets, the new landfill regulations were considered on both sides as being a considerable barrier to achieving future recycling targets. Therefore, both parties set up a working group, including senior technicians and managers from both organisations, and held regular meetings to work jointly towards the implementation of new technology for the EfW plant. Subsequent technology changes and adjustments to future recycling targets also needed to be reflected in the contract, which was renegotiated so as to incorporate this exogenous initiative.

Two ‘seminar’ events were identified across the cases which were both initiated by the supplier in the Swindon Hospital case. Whilst the tendering seminar occurred at the outset of the bid/contract negotiation phase, the second ‘seminar’ event took place at the beginning of the operate phase. The former event was deployed to increase the buyer’s understanding regarding the drawing up of documents for output specifications and to establish inter-personal relationships prior to the ‘site search and planning permission’ event, during the early project phase. The latter event, a ‘relationship away-day’, was initiated by the supplier to increase information sharing among senior personnel. Having gone through a myriad of contract changes and
operational problems, such as faulty lifts during the build phase, the event was introduced “ [...] to discuss relationship issues off site [...]” (General Manager, Swindon Hospital, private partner).

The event ‘team co-location’ occurred during the early build phase in the Oxford Hospital case. Both partnering organisations decided to facilitate information sharing and the formation of inter-personal relationships, by co-locating their offices in the same building and in close proximity to the hospital’s construction site. This action was beneficial for the relationship, as frequent communication between individuals of the partnering organisations led to prompt solutions to problems. Interviewees described the team co-location as creating a ‘friendlier atmosphere’, because individuals were able to solve problems face-to-face instead of using more impersonal means, such as phone calls or emails.

The event type ‘operational problem’ occurred mainly during the operate phase and was either initiated by the buyer organisation or by exogenous initiatives. For example, the operational problem ‘gritting car park’ during the operate phase of the Swindon Hospital case was addressed by the buyer organisation. Recurring heavy snowfalls during the first winter of the early operate phase impacted negatively on the availability of the hospital’s car park. Although the complex contract sets out various service performance levels, it did not stipulate the partners’ responsibilities regarding gritting material and machinery. This event led both parties to adopt an arm’s-length relationship approach, characterised by mutual blaming behaviour and lengthy discussions ensued about who was responsible for providing car parking. Both parties referred to the incomplete contract in order to resolve this operational problem. After lengthy discussions and contract renegotiations, they agreed to share the costs for gritting material and machinery and the responsibility for car parking was transferred to the private supplier.

In contrast to the ‘gritting car park’ event, the ‘water pipe incident’ during the early operate phase of the Gloucestershire Fire and Rescue Service case represents an event that had a positive impact on the overall relationship. Having gone through a myriad of contract changes during the build phase, for instance to include an additional staircase at the training site, both parties jointly agreed to set up a working agreement. This intermediate contract contains the most important contractual
clauses used on a day-to-day basis. Moreover, both parties drew up this intermediate contract to reflect minor changes in the relationship. This contract facilitates prompt solving of relationship problems as contract changes do not need to be reflected in the complex contract on an ongoing basis. In this regard, contract changes are incorporated in the intermediate contract and only addressed on a yearly basis in the complex contract. Interviewees reported that the establishment of this intermediate contract was only possible after both parties had observed each other’s goodwill and commitment to the relationship. In particular, the inter-personal relationship between two boundary-spanning individuals at the outset of the relationship facilitated the site search for the training centre.

Event type ‘contracting work’ occurred during all three project phases and was initiated endogenously and exogenously. The early project phase was typified by partnering parties negotiating each others’ responsibilities and commitments regarding the long-term relationship. Once the contract was signed, contract renegotiations took place, in some cases during the late build phase. For instance, the South Wales Fire and Rescue Service and Kirklees Waste Management cases started renegotiating their contracts at the end of the build phase, to reflect changes to the building sites, such as the training centre site and the recycling plants. Similarly, parties in the Swindon Hospital case had to incorporate more than 430 contract variations during the hospital’s build phase. These contract renegotiations were also used to renegotiate service performance levels and to clarify each partner’s responsibilities before commencing the operate phase. Further contract negotiations occurred around the benchmarking exercise. For example, parties in the Gloucestershire Fire and Rescue Service case needed to address the low 3rd party income generation by renegotiating previously set service levels.

The following sub-sections discuss the impact of individual event types on governance combinations.

*Impact of event types on governance combinations*

The event type ‘team change’ had a similar impact on the overall relationship development across the cases, leading to a decrease in relational governance combined with a medium significance of contractual governance. Two of the three
‘team change’ events took place in the early build phase (after the contract had been signed). For instance, the whole of the supplier team was changed during the early build for the Gloucestershire Fire and Rescue Service. This team change negatively impacted on the existing boundary-spanning relationship between two individuals from the partnering organisations, in that it became redundant after the individual from the supplier team left the project. Relationship problems during the early build phase in this case were resolved using contractual governance mechanisms, as interpersonal relationships had not yet been re-established.

In contrast, ‘mutual investment’ events, which were only observed in the better performing cases, which included: ‘visitor and education centre’ and ‘acquiring additional land’, were governed by medium significance of contractual governance combined with a high significance of relational governance. Both events occurred during the operate phase in the Kirklees case after both parties were able to observe each other’s willingness and commitment to sustain a long-term relationship. ‘Regular meetings’ events were mostly governed by high to medium significance of contractual governance combined with medium significance of relational governance. This finding reflects the elevated importance of regular meetings in early project phases, when negotiating contractual terms or during the build phase. Moreover, ‘regular meetings’ in the early project phases of the Kirklees Waste Management and Surrey Waste Management cases were necessary to exchange relationship-specific information and to clarify responsibilities and duties which had not been clearly specified in the contract.

‘External changes’ to the immediate relationship environment were counteracted by deploying a balanced governance combination of high contractual and high relational governance significance. This indicates that changes in the relationship environment may have a positive, ‘relationship-strengthening’ effect, if both parties have built up a relationship characterised by mutual trust and information sharing prior to the event. Changing waste management regulations in the Kirklees Waste Management case led to contract renegotiations so that it reflected the changing project environment and the regulations’ impact on increased recycling rates. Regarding the latter issue, having previously observed the willingness to commit mutually to relationship-specific investments, both parties built up inter-personal relationships
which helped to overcome the impact of regulatory changes on the project during the operate phase.

‘Seminar’ events, such as the ‘relationship away-day’ at the Swindon Hospital, and the ‘team co-location’ at the start of the build phase at the Oxford Hospital, illustrate situations where both partnering organisations deployed an event to increase information flow. Both events had a similar impact on the significance of both governance mechanisms. Whilst relational governance increased from low to medium significance, contractual governance stayed high (‘team co-location’) or slightly decreased from high to medium (‘relationship away-day’). For instance, the ‘team co-location’ event during the early build phase in the Oxford Hospital case was used to build up inter-personal relationships between both teams after lengthy contract negotiations. The six different types of events described above are equally impacting in terms of contractual and relational governance mechanisms and similarities could be found across the cases. However, the following two event types, ‘operational problems’ and ‘contracting work’, show significant differences across the investigated cases.

The majority of ‘operational problems’ were resolved by applying high significance of contractual governance combined with low significance of relational governance. Most events with high contractual governance combined with low relational governance significance followed an event characterised by the same governance combination. In this regard, preceding events were mostly found among the following three event types: ‘operational problems’, ‘contracting work’ and ‘team change’. In particular, an ‘operational problems’ event following a ‘regular meetings’ event type, such as ‘relationship away-day’, was not able to sustain a medium level of relational governance and was (again) typified by high contractual governance combined with low relational governance. A possible explanation for this observation might lie in the different ‘levels’ of the participants who are affected by these events. That is, although the ‘relationship away-day’ aimed to improve relationships at a managerial level, operational problems were primarily encountered by operational staff. Consequently, these operational problems were not resolved in a timely and efficient manner, thus leading to further relationship problems. In contrast, the Gloucestershire Fire and Rescue Service case illustrates how operational
problems can be resolved in a timely fashion by applying a more balanced governance combination, i.e. medium contractual governance combined with medium to high relational governance. Hence, ‘operational problems’ events could also serve the function of ‘relationship strengthening’, thereby leading to decreasing contractual governance and increasing relational governance mechanisms significance.

Finally, ‘contracting work’ events were all characterised by high significance of contractual governance. However, two distinctive patterns emerged that illustrate the path dependency of the ‘contracting work’ event type. That is, whilst one group of events was typified by high contractual governance combined with low relational governance, the other group was governed by high contractual governance combined with medium to high relational governance. The former group followed events which mostly had a negative impact on the overall relationship, such as ‘missed planning permission’, or low ‘3rd party income generation’, whereas the later followed mostly positive events, including ‘team co-location’ and ‘regular meetings’. For instance, facing low levels of ‘3rd party income generation’, the public buyer in the Gloucestershire Fire and Rescue Service case, adopted a more arm’s-length relationship approach to drive income generation and this was characterised by high contractual governance combined with low relational governance. In contrast, co-locating the buyer and supplier team in the Oxford Hospital case helped to increase information exchange and the formation of inter-personal relationships. Subsequent contract negotiations were governed by high contractual governance combined with medium relational governance.

In the following sub-sections the research sub-question four is addressed by showing how the investigated case findings provide evidence.

6.1.4 Research sub-question four

Having discussed contractual governance, relational governance and their interplay at different points in time, this sub-section investigates the governance trajectories and their impact on overall performance. Governance trajectories in this research describe the paths of contractual governance, relational governance and governance combinations along the investigated event series. Deploying the term governance
trajectory indicates the dynamic rather than static nature of these forms of governance over the long-term supply relationship.

The following sub-sections revisit the governance combinations of contractual and relational governance mechanisms, taking into consideration their paths. The section concludes by reviewing two discrete exchange trajectories.

*Paths of governance combinations*

The path of the governance combinations for the Oxford Hospital case illustrates that succeeding events are governed by governance combinations which are identical or belong to one of the neighbouring combinations (refer to 5.3.2 Paths of governance combinations). In this respect, the ‘change of supplier team’ and ongoing contract negotiations during the bid/contract negotiation phase were governed by medium to high contractual governance combined with low relational governance. Having gone through an extended bid/contract negotiation phase, both parties co-located their teams to increase information sharing and to support the formation of inter-personal relationships. The events ‘team co-location’ and ‘contract renegotiations’ during the build phase were governed by high contractual governance combined with medium relational governance. This case example illustrates that the governance combination of the preceding event determines the choice of the governance combination for the succeeding one. This research deployed a 3x3 matrix for contractual and relational governance mechanisms, thus allowing for nine possible governance combinations. Although, theoretically there are nine governance combinations available for succeeding events, the cross-case analysis has depicted that for subsequent events, in all cases but one, the governance combination does not move further than to one of the neighbouring governance combinations. This was observed across the investigated cases regardless of overall performance or project phase.

*Degrees of governance combinations*

Although, theoretically there are nine governance combinations available to govern events, the cross-case analysis has shown that only a limited set of governance combinations were adopted. In this regard, only medium and high contractual governance combined with low, medium and high relational governance were
deployed across the investigated cases, resulting in six governance combinations. This finding underlines the evidence for addressing research sub-question one, regarding the importance of contractual governance in those long-term, complex relationships. Moreover, in only two out of the six governance combinations that were observed, were there instances of the succeeding event involving the same governance combination as the preceding event. That is, the same governance combination for both events was observed in the circumstances where contractual governance was of high significance combined with low and medium significance of relational governance. In general, the above supports the view that governance combinations are dynamic rather than static throughout the relationship.

Combining the above observations regarding the degrees of governance combinations with the paths of these combinations for each individual project serves to reinforce the finding that only a limited set of governance combinations were employed. For instance, the Swindon Hospital case deployed only three different governance combinations and two of these governed six out of seven events. The following sub-sections present and explain two key different governance trajectories which were evident across the investigated cases.

**Governance trajectories**

It was observed that limited inter-organisational and inter-personal trust at the outset of a relationship led to an ineffective information flow across the partnering organisations and an absence of personal bonding and routinised behaviour. Consequently, owing to the lack of these factors, the detailed, complex contract served as the main safeguard against opportunistic behaviour during the early project phases. For instance, relationship problems in the Surrey Waste Management case were approached by consulting contractually stipulated procedures followed by lengthy contract renegotiations and mutual blaming behaviour. Here, the complex contract was used as a legal safeguard to protect against relationship risks and to clarify each party’s responsibilities. This approach elevated the difficulties regarding operational problems, such as ‘missing planning permission’ and ‘missed recycling targets’. However, the effective application of contractual governance mechanisms to deal with these problems was hindered by the incompleteness of the contract, which
led to relationship ambiguity as the contract did not provide clear contractual terms and procedures for overcoming relationship problems that occurred. Moreover, these relationship problems were further pronounced, because both organisations had not established information-sharing routines at the outset.

During later project stages, in some of the cases when inter-personal trust started to develop, relational governance mechanisms were found to be increasingly used to solve relationship difficulties. This observation supports the findings by Ring and Van de Ven (1994) that trust develops over time in long-term relationships. At the same time, the application of contractual governance mechanisms was still prevalent when focusing on contract variation processes and contract renegotiations with regard to refinancing and benchmarking issues. This relative emphasis on different governance mechanisms follows what might be considered a typical trajectory for novel exchange arrangements. That is, at the outset, with limited inter-personal relationships between buyer and supplier, relational governance is of low significance. Faced with high levels of complexity and uncertainty, all parties put a great deal of emphasis on “getting the contract right”, thereby driving up the significance of contractual governance, which was consistent with Williamson’s (1985) findings. Contracts, in general, are seen to support the earlier, more vulnerable stages in a relationship and long-term contracts are explicitly drafted with provisions to promote the longevity of exchanges.

In contrast to the governance trajectory described above, those evident in the Kirklees Waste Management, the Gloucestershire Fire and Rescue Service and the South Wales Fire and Rescue Service cases illustrate the fact that inter-personal trust changes over time, developing, building, and even resurfacing in long-term relationships. For example, inter-personal trust was found to be an important predictor of successful negotiations and conflict management, as illustrated in the Gloucestershire Fire and Rescue Service case where inter-personal trust facilitated successful contract negotiations and extended site search. Here, boundary-spanning individuals from both parties exchanged relationship-specific information, which helped to build up a more collaborative relationship, resulting in joint efforts to identify an appropriate site for the training centre. This demonstrates and thus supports Fichman and Goodman (1996) view that inter-organisational trust can be
influenced by micro level arrangements such as how boundary-spanning individuals represent each firm and how they relate to each other.

It was found that contract negotiations centred on the establishment of the complex contract, but also included discussions on how cooperation should progress. At the same time, the bid/contract negotiation phase served as a period for both partners to get to know each other and to interact frequently. These interactions helped to create a common language, stimulated openness and facilitated the formation of inter-personal trust. Having established inter-personal relationships at the outset in the Gloucestershire Fire and Rescue Service case, the development of inter-personal trust suddenly stopped after the boundary-spanning individual of the private supplier left the project during the early build phase. This team change also negatively impacted on the establishment of inter-organisational relationships, as information sharing routines and procedures established on an inter-personal level had not been passed on to the inter-organisational level. These developments resulted in a lengthy process required to re-establish inter-personal relationships across the organisations during the build phase.

Moreover, the parties involved jointly drew up an intermediate contract to facilitate day-to-day operations and to resolve upcoming relationship difficulties more promptly. The contractual governance provided customised approaches and mutually agreed policies and procedures for dealing with the necessary adaptations in a relationship, aimed at supporting a long-term, trusting relationship, a finding that is consistent with that of Klein Woolthuis et al. (2005). Formal control mechanisms may increase trust by providing actors in a relationship with objective rules and measures for assessing each other (Sitkin, 1995). In this particular case, the complex contract was considered as being a commitment to the relationship, because both parties invested a substantial amount of time and financial resources in drawing it up and in negotiating relationship-specific information. That is, the complex contract focused on the formulation of relationship objectives and operational guidelines, such as project plans and milestones.

After the supplier’s boundary-spanning individual left the project during the build phase the inter-personal relationship was effectively redundant. Over time, inter-personal relationships were re-built between new employees, but from the overall
relational governance trajectory, it can be seen that after the inter-personal trust dropped substantially the rebuilding of the relationships appeared to be a slow sequential and incremental process. It should be noted that even in this case, with far greater early emphasis on informal exchange, contractual governance was never categorised as being of low significance. Even during those events where parts of the contract were effectively put to one side, for instance during the ‘water pipe incident’, where rapid service recovery was reliant on inter-personal relationships, there were subsequent revisions of the intermediate and complex contract and it was only because all parties had a detailed knowledge of the contractual arrangements that the implications of a ‘set aside’ were considered to be tolerable.

Summary of governance trajectories

The early phases of the former of the two above exchange trajectories illustrate the use of contracts as strict legal safeguards that counteract opportunism. In contrast, the latter exchange trajectory highlights that in a trusting relationship, the contract tends to be interpreted as a tangible expression of trust that has been built up at an individual or organisational level. In other words, in accordance with the view of Klein Woolthuis et al. (2005), a contract can achieve a function that differs from enforcement and legal safeguarding and can even be interpreted as a sign of commitment, as was reflected in the Gloucestershire Fire and Rescue Service case. Contractual and relational governance mechanisms are complementary forms of exchange governance, and more specifically, relational assumptions, experiences and intentions of all parties appear to frame actively whether the contract and contracting process is interpreted as a sign of distrust or a written manifestation of commitment.

6.2 Revisiting the Conceptual Framework

This section revisits the initial conceptual framework based on the discussion of the case findings and analysis. In this context, the conceptual framework links together concepts related to contractual governance, relational governance and their interplay in long-term supply arrangements.
Overall, the initial conceptual framework supported the research by providing a structure for the data collection and analysis. This research did not find major inconsistencies in the conceptual framework with regards to the findings, but refinements can be made based on the research outcomes.

**Figure 53** Initial conceptual framework

**Figure 54** Revised conceptual framework
Figure 54 illustrates how the conceptual framework has been modified following the empirical research by providing more detail on the conceptual elements and their linkages. These refinements to the initial conceptual framework are examined in detail in the following sub-sections. The revised conceptual framework re-emphasises the importance of contractual and relational governance as inter-organisational governance mechanisms in supply arrangements. The framework also draws out the dynamic interplay of both governance mechanisms over time in supply arrangements. In addition, the revised conceptual framework incorporates three significant changes.

First, the conceptual framework illustrates the refinement of contractual and relational governance mechanisms into four governance components. Whilst contractual governance is subdivided into complex contracts and intermediate contracts, relational governance is split into inter-organisational trust and interpersonal trust. The empirical findings underline the importance of each component in the supply arrangements. Moreover, the research study provides a refocus of different components of inter-organisational governance and their dynamic interaction over time.

Second, governance components can be illustrated along a governance continuum which is divided into three levels: macro, meso and micro, where the macro and meso level depicts the inter-organisational and organisational level of the supply relationship and the micro level illustrates the individual level of the relationship. The revised conceptual framework highlights the interdependence of all three levels along the governance continuum and their interplay over time.

Third, the findings have shown that whilst complex contracts appear to be path dependent, inter-personal trust can be otherwise described as past dependent. In this regard, the results indicate that complex contracts are path dependent, that is, the sequence of past events matters for future events. In contrast to complex contracts, inter-personal relationships are past dependent, that is, past events are important in determining the state of future events, but their specific sequence and temporal unfolding may not necessarily follow a particular path.
The conceptual framework in Figure 53 has now been re-examined and modified as a result of the findings (Figure 54). More specifically, it reveals the interplay of contractual and relational governance in long-term supply arrangements. The modifications of the revised conceptual framework explained above are central to the research questions and are examined further in the next chapter.

6.3 Chapter Summary

This chapter has discussed the case findings in the light of the background literature, the research questions and the conceptual framework. In particular, the central research question has been addressed by providing responses to the research sub-questions that were operationalised in the study through six case studies involving long-term public-private supply arrangements. Consequently, a revised conceptual framework was introduced. Chapter Seven concludes by discussing the contribution of this research, its limitations and provides suggestions for further research.
CHAPTER SEVEN: CONCLUSIONS AND REFLECTIONS

Introduction to Chapter

This final chapter considers the contribution of the study, the implications for research and practice, and the limitations. Section 7.1 considers the theoretical contributions and section 7.2 proposes the practical implications. Section 7.3 presents the reflections on the research process and its limitations. Possible future research avenues are discussed in section 7.4.

7.1 Theoretical Contributions

This research has explored the different components of inter-organisational governance as they interact over time. In particular, drawing on the results of the case studies a novel perspective on the dynamic interplay between the contractual and relational governance mechanisms that comprise inter-organisational arrangements has been proposed. Compared with relational governance, much fewer research studies have incorporated contractual governance and still fewer investigated the interplay of both governance mechanisms (Poppo and Zenger, 2002; Cannon et al., 2000; Klein Woolthuis et al., 2005; Vandaele et al., 2007). This study contributes to the existing body of research by demonstrating, not only the interplay of contractual and relational governance mechanisms, but also the performance implications for the exchange relationship and thereby expands upon the limited empirical research, to date, regarding the interplay of both governance mechanisms. Whilst the majority of previous studies have deployed a theoretical or quantitative research standpoint through the carrying out of surveys, this research adopted a case study methodology to explore the phenomena in more detail. In addition, this study adds to the existing research by investigating governance interplay from a dyadic relationship perspective and by exploring the dynamic interplay of both governance mechanisms over an extended period of time.
The presentation of the theoretical contributions covered in the following subsections is based on Figure 55, which illustrates the dynamic interplay between contractual and relational governance.

### 7.1.1 Governance continuum

Figure 55 illustrates three identified levels of governance along a governance continuum, ranging from macro to meso to micro and their associated governance components. Whilst the macro and meso level depicts the inter-organisational and organisational level of the relationship, the micro level illustrates the individual level.

The macro-micro continuum refines the initial conceptualisation of contractual and relational governance mechanisms, by illustrating the various interrelated components comprising both governance mechanisms. The continuum also emphasises the interaction of governance mechanisms in the supply arrangements across multiple boundaries, that is, from inter-organisational to individual levels. Moreover, the macro-micro continuum illustrates the different ‘units of analysis’
ranging from complex contracts to inter-personal trust. Thus, the continuum reflects the multiple levels on which the inherent inter-organisational governance mechanisms act. Hence, the findings draw out the importance that inter-organisational governance needs to be analysed at different levels and at different points in time.

Previous governance studies have concentrated on the inter-organisational level and ignored the importance of the micro or individual level, thus they failed to capture the interactions of all three levels over time. That is, these studies artificially constrained the boundaries of inter-organisational governance by neglecting the inter-personal level of trust as part of relational governance mechanisms. In addition, the research findings add to the understanding of the roles of contractual and relational governance mechanisms, by identifying and explaining the functions of the governance components across the three levels. For instance, the research results have revealed how actions on the micro level, as executed by boundary-spanning individuals, affect the macro and meso level of the governance continuum. In this context, relationship-specific information exchange between boundary-spanning individuals in the Gloucestershire Fire and Rescue Service case facilitated the drafting of sensitive contract terms, such as contract termination procedures. Such analysis of governance components across different levels is supported by prior research studies on trust in inter-organisational relationships (e.g. Zucker, 1977; Zaheer et al., 1998) which emphasised the importance of studying inter-personal and inter-organisational levels of trust.

The following sub-sections successively explore the identified governance components, their associated levels and their interplay over time.

7.1.2 Dynamics of contractual governance

Macro level - complex contracts

The governance component complex contracts represents the macro level along the governance continuum (Figure 55). Prior studies focused on the point of establishing the contract, but limited research has focused on the role of the contract over the relationship period. Thus, this study makes a significant contribution by adding to the scant empirical evidence regarding the role of contractual governance in long-term
inter-organisational relationships (Halldórsson and Skjøtt-Larsen, 2006). More specifically, whilst the extant literature has suggested that contracts occupy a crucial role at the outset of the relationship, the findings have revealed that contractual governance retained high significance throughout the relationship.

Organisations entering into long-term supply relationships place high emphasis on the formation of complex contracts, including, for instance, clauses to penalise non-compliance with contractually stipulated terms (Lyons and Mehta, 1997). That is, contracting organisations are aiming to foresee and hence prepare for future relationship contingencies, which leads to complex contracts being drawn up. The bid/contract negotiation phase across the investigated cases involved extended timeframes, reflecting the contracting organisations’ high levels of investment in order to arrive at a complete and complex contract. It emerged that contractual governance was deployed to incorporate legal safeguards into the contract, such as penalty systems for counteracting opportunistic behaviour and clauses for unforeseeable contingencies. Throughout the relationship, regular contract variations were arranged to reflect the relationship changes over time. Because various legal requirements to reflect ongoing relationship changes are required in the complex contract, the latest revised version reflects the “status quo” of the buyer-supplier relationship. Regular contract variations and subsequent contract negotiations also reflect the importance placed on contractual arrangements throughout the relationship.

Revised contracts may also facilitate the introduction of new staff to the relationship. Long-term relationships, such as the empirically investigated Public Private Partnerships of this study, are characterised by recurring changes in team personnel on the buyer and supplier sides. As a reflection of the ongoing supply relationship, a contract may be deployed as a useful tool for new team personnel to understand the current relationship status. The findings have shown that the complex contracts in question have been referred to at all times during the buyer-supplier relationship, for instance, to incorporate relationship-specific changes or to reflect altering regulatory environments. Further, the empirical research has shown that the trajectories of complex contracts exhibit a limited degree of freedom. That is, once a complex contract is constructed, by going through various stages, such as the tendering
process and a lengthy contract negotiation phase at the outset of the relationship, it
does not easily erode and therefore ‘anchors’ the exchange relationship throughout
the life cycle. This trajectory can be described as path dependent, as the sequence of
past events shape those of the future. For instance, after the initial contract has been
signed at the outset of the relationship, complex contracts go through a myriad of
variations throughout the relationship life cycle and all of these changes are
dependent on how the initial contract was established. In other words, legal contract
changes on relational matters are strongly path dependent on the original complex
contract and how it was drawn up.

The following sub-section explains intermediate contracts as representing the meso
level along the governance continuum (Figure 55).

*Meso level - intermediate contracts*

Given the complexity of the contracts and managerial problems in executing them
owing to the significant number of schedules and procedures, the contracting parties
in two of the cases, the Gloucestershire Fire and Rescue Service and Kirklees Waste
Management cases, established simplified, non-legally binding working agreements.
These working agreements or intermediate contracts represent the meso level of the
governance continuum (Figure 55). Such working agreements, which were deployed
alongside formal contracts, contained extracts of contract clauses, procedures and
guidelines that proved helpful on a day-to-day basis. Complex, formal contracts in
these cases were only deployed to resolve relationship issues exceeding the realm of
the working document or when extensive relationship changes needed to be reflected
in the formal, legally binding complex contract. In these cases, complex contracts
were considered as commitment to the long-term relationships rather than a purely
legal safeguard.

It should be noted that these intermediate contracts were only found in better
performing cases, such as Gloucestershire Fire and Rescue Service and Kirklees
Waste Management, as mentioned above. Moreover these cases showed evidence of
better performance in delivering joint relationship solutions outside the contractual
framework, such as the visitor and education centre or the erection of an additional
staircase. In addition to representing better performing supply relationships, both
cases also had already built up inter-personal relationships between boundary-spanning individuals from the partnering organisation. Thus, the contracting parties in both scenarios were able to observe the counterpart’s willingness to act outside the contractual framework when resolving relationship problems. In general, in order to deploy effectively intermediate contracts both parties need to be willing to apply a more flexible approach to solving relationship problems and limit the use of complex contracts.

The empirical findings also show that relational governance, in the form of boundary-spanning individuals, facilitated the formation of intermediate contracts. This empirical observation confirms the underpinnings of relational contracting as developed by Macneil. He argues that “never has a contract occurred without a society; never will it occur without society; and never can its functioning be understood isolated from its particular society” (Macneil, 1980, p.2). Opposing classical contract theory, Macneil (1978, 1980) argues that a contract, based on the idea of discrete transactions, ignores the agreements needed to enable and sustain relationships in more complex contracting situations. In this context, the empirically observed intermediate contracts reflect the complementary effects of contractual and relational governance as proposed by this author.

### 7.1.3 Dynamics of relational governance

Relational governance emerges from the values and agreed-upon processes in the exchange relationship (Macneil, 1980) and incorporates trust and commitment (Lui and Ngo, 2004). Trust is a vital component of relational governance and this research study conceptualised two different trust dimensions: inter-personal and inter-organisational. The former is referred to as “the extent of a boundary-spanning agent’s trust in her counterpart in the partner organisation” (Zaheer et al., 1998, p.142). That is, inter-personal trust is established among individuals of the contracting organisations based upon close interaction and personal ties (Macaulay, 1963; Kale et al., 2000). In contrast, inter-organisational trust is defined as “the extent of trust placed in the partner organisation by the members of a focal organisation” (Zaheer et al., 1998, p.142). The results of this empirical study suggest that it is important to distinguish between inter-personal and inter-organisational trust. The following sub-sections review the theoretical contributions of this study to
the meso and micro levels of relational governance, inter-organisational and inter-personal trust, respectively.

**Meso level - inter-organisational trust frameworks**

The governance component, inter-organisational trust, represents the meso level along the governance continuum (Figure 5). This research found limited evidence of organisational frameworks to facilitate the formation of inter-organisational trust in the studied cases. This is not surprising given that European and national procurement laws, which include extensive regulatory frameworks, leave little leeway to apply a more relational contracting approach, based on: common goals, agreed risk-sharing, and open communication. In the context of this research, such exogenous drivers were found to limit the formation of inter-organisational frameworks which could facilitate trust building among the contracting parties. That is, the rigid and prescriptive regulatory frameworks, as found in all the investigated cases, further underline how the legal requirements, which manifest themselves in large numbers of performance clauses, can serve as a hindrance to the development of inter-organisational trust.

Building inter-organisational trust through the use of contractual governance is limited to established routines of information sharing and joint senior meetings, as outlined in the complex contract. Moreover, these contractual procedures provide rigid frameworks for formal meetings among senior personnel or for formal information sharing across the various stakeholders. For instance, the ‘tendering seminar’ at the relationship outset of the Swindon Hospital case and the joint workshop at the start of the Kirklees Waste Management case represent two examples where formal socialisation mechanisms facilitated the creation of personal relationships among personnel from partnering organisations. However, maintaining these personal relationships among individuals from the partnering organisations is not further supported by the organisational frameworks set out in the complex contract.

The empirical findings revealed little evidence of there being organisationally sanctioned socialisation mechanisms, such as joint workshops. In the few instances where such events did happen, they facilitated the creation of inter-personal
relationships and the exchange of tacit knowledge, which was then transferred via personal networks across the organisations involved. However, complex contracts offer only limited guidance for facilitating the formation of further socialization mechanisms, such as cross-functional teams or informal meetings. For instance, the formation of cross-functional teams with representatives from both partnering organisation may act to connect individuals across the contracting parties, thereby resulting in closer interaction and creating a network of interdependent social exchanges (Lawson et al., 2009). Such teams and the resulting individual relationships could increase the level of mutual trust and respect across both contracting parties. However, cross-functional teams are not inherently good, unless they are effectively managed and have: established goals, directed charters, resources, and effective leadership (Trent and Monczka, 1994). Thus, the formation of established organisational frameworks, as laid out in the complex contract, can facilitate team building.

Establishing organisational frameworks to build up inter-organisational trust is vital given the sequential and slow process usually associated with its development. This was apparent in this research as the contracting parties were found to be observing and testing each other’s goodwill over time, sequentially and gradually, in the endeavour of trying to build inter-organisational trust. This confirms Ring and Van de Ven’s (1994) findings that the development of trust is a cyclical process of recurrent bargaining, commitment, and execution of events among both partners and similar to the formation of inter-organisational trust, its decline is quite gradual. For instance, the formation of inter-organisational trust was facilitated by the ‘tendering seminar’ at the relationship outset of the Swindon Hospital case. However, limited organisationally sanctioned frameworks were established to maintain and nurture inter-organisational trust that arose, resulting in a decline in this trust over time.

*Micro level - importance of boundary-spanning individuals*

Interestingly, it is the formation of inter-personal trust, as established by boundary-spanning individuals, which distinguishes the investigated cases. Inter-personal trust represents the micro level along the governance continuum (Figure 55). A relationship characterised by boundary-spanning individuals involves: sharing sensitive information, investing efforts in understanding each other’s business and
customising shared systems to serve the mutual interests in the long-term relationship. The research findings concur with those of Malhotra and Murnighan (2002), in that it emerged that frequent interaction between boundary-spanning individuals during the bid/contract negotiation phase facilitates the formation of cooperative relationships to complement complex, yet incomplete, contracts. In contrast to inter-organisational trust, inter-personal trust was built up by boundary-spanning individuals of the partnering organisations. These individuals were characterised by their exhibiting a higher degree of information exchange and a heightened willingness and commitment to the overall relationship, thus exceeding other team members’ commitment to the relationship.

The study’s empirical evidence supports Chalos and O’Connor’s (1998) findings that meetings between boundary-spanning individuals often occur outside of the context of “official role requirements” and may communicate clues as to how to proceed with the relationship. For example, the two boundary-spanning individuals in the Gloucestershire Fire and Rescue Service case did not just act in their official role as managers for both contracting parties, but as two individuals who showed a willingness to understand each other’s project aims and objectives. The formation of boundary-spanning relationships is also linked to opportunities for demonstrating and judging trustworthiness. For instance, extended site search in the Gloucestershire Fire and Rescue Service case presented an opportunity which allowed the partners’ to evaluate this feature.

In contrast to the trajectory of complex contracts, which can be described as path dependent, the trajectory of inter-personal trust is better reflected as past dependent and this has been referred to under the notion that ‘history matters’. That is, past events are important in determining the state of future events, but their specific sequence and temporal unfolding may not necessarily follow a particular path or trajectory (Araujo and Harrison, 2002). Boundary-spanning individuals observe and test over time each other’s goodwill and commitment to the relationship, thus past experience plays an important role in establishing and maintaining inter-personal relationships. The evidence from the research showed that establishing such relationships across partnering organisations in earlier relationship phases yielded positive outcomes, including increased information flow. Moreover, increased
information exchange between boundary-spanning individuals also proved important when drafting the complex contract.

Boundary-spanning individuals were able to immerse themselves in the partnering organisation’s culture and environment, thus leading to a better understanding of the counterpart’s objectives and goals. This shared understanding could be directly translated into establishing formal routines and procedures when drafting the complex contracts at the outset of the relationship. In this regard, a shared understanding facilitates the drafting of sensitive clauses, such as: penalty systems and contract termination or performance measurement systems. The boundary-spanning relationships also supported a more proactive conflict resolution at the relationship outset. However, the investigated cases showed limited evidence of organisationally sanctioned frameworks to facilitate the establishment of inter-personal trust. If inter-personal relationships are formed, they can be made stronger through social events, informal workshops, off-site meetings or even casual meals at a local restaurant (Krause et al., 1998).

The empirical results suggest that inter-personal trust based on the relationship of boundary-spanning individuals can easily be eroded once an individual leaves the project. This illustrates the fragility of inter-personal relationships, in that if one person leaves inter-personal trust is lost and when this involves a boundary spanning relationship it can impact on the organisational partnership. In such circumstances, rebuilding these forms of relationships is a gradual process that takes time. In contrast, inter-organisational trust diminishes gradually step by step as it does not, in comparison to inter-personal trust, rely on individuals, but rather on teams and established organisational frameworks. Figure 56 illustrates how inter-personal and inter-organisational trust declines over time.
In sum, inter-organisational procedures and processes need to be established to facilitate and nurture the formation and maintenance of inter-personal relationships throughout the duration of the partnership. These procedures will be most effective when incorporated in the complex contract at the outset of the relationship so as to provide a framework for the formation of inter-personal trust, which subsequently can facilitate the formation of greater inter-organisational trust.

Translating inter-personal into inter-organisational trust

In order to maintain inter-personal relationships among contracting parties’ personnel, inter-personal trust that develops should be translated into inter-organisational trust by establishing organisational procedures, such as team meetings and information exchange. Effective information sharing as between individuals should be adopted at the inter-organisational level, in order to build more and firmer boundary-spanning relationships between individuals from both partnering organisations. For instance, initiating after-work meetings to facilitate informal information sharing between boundary-spanning individuals proved useful for building up trust between individuals. This finding supports previous assertions that strong inter-personal ties established through boundary-spanning relationships can be seen as channels through which partners learn and share knowledge (Gulati and Gargiulo, 1999; Lawson et al., 2009).

Moreover, these routines should be translated into the inter-organisational context to facilitate further formation of inter-personal trust, in order to deliver its positive

![Figure 56](image.png) Differential dynamics of inter-organisational and inter-personal trust

Decline of inter-organisational trust

Decline of inter-personal trust
consequences, such as increased information sharing and joint problem solving at this level. In addition, establishing organisational frameworks, supported by complex contracts, which ‘translate’ routines of information sharing and knowledge exchange from an inter-personal level to an inter-organisational level, is vital for the relationship. In other words, socialisation mechanisms that embed the relationship facilitate the exchange of “fine-grained” information (Uzzi, 1997) by helping to create common norms and compatible cultures (Doz and Hamel, 1998), which in turn can be translated into organisational frameworks.

Furthermore, building up inter-organisational and inter-personal trust enables sharing of relationship knowledge and proprietary information between buyer and supplier, which subsequently may lead to improved overall performance. In addition, more informal socialisation mechanisms, such as off-site events or away-days, could be an important avenue for sharing knowledge and overcoming the behavioural and cultural barriers inherent in these long-term, complex supply arrangements. In general, a high level of interaction between a variety of actors across organisations, and strong communications, leads to the building of personal familiarity, improved communication, and more effective problem solving (Gupta and Govindarajan, 2000).

Draft and Lengel (1986) argue that personal and more open communication, as exercised by boundary-spanning individuals, may also increase the richness of the communication itself, which in turn can enhance the inter-organisational relationship. Moreover, inter-personal and inter-organisational trust facilitates the development of a “common language”, which can foster a shared understanding among the contracting parties. In other words, relational governance mechanisms facilitate the transfer of both codified and tacit knowledge between team partners. In particular, because tacit knowledge cannot be distributed in explicit form (Davenport and Prusak, 1998), for example, via written communication, relational governance mechanisms may provide the incentive to build inter-personal trust to facilitate such knowledge exchange.

Having reviewed the four identified governance components: complex contracts, intermediate contracts, inter-organisational trust and inter-personal trust and their
associated levels, in the following sub-section the dynamic interplay between governance mechanisms and their impact on overall performance is considered.

**7.1.4 Dynamics of governance interplays and their impact on overall performance**

The results of this study suggest that contractual and relational governance mechanisms are complementary forms of inter-organisational governance. For instance, it was found that the establishment of inter-personal trust at the outset of the relationship supported the formation of complex contracts. In addition, inter-personal trust, as exercised by boundary-spanning individuals, facilitated the exchange of relationship-specific information and openness to address sensitive relationship issues such as relationship termination and contractual penalties.

Referring back to previous research on inter-organisational governance, this study’s empirical evidence supports recent findings in the extant literature that contractual and relational governance mechanisms are complementary (Das and Teng, 2001; Bennett and Robson, 2004; Ferguson et al., 2005; Lazzarini et al., 2004). However, this research study contributes to existing theory as it explores the dynamics and nature of the governance interplay over time. That is, previous studies on inter-organisational governance have typically investigated governance mechanisms at a certain point in time, thus neglecting the dynamic nature of inter-organisational governance across the relationship (Halldórsson and Skjøtt-Larsen, 2006). The results of this research have revealed that conceptualising contractual and relational governance over time and hence investigating them from this perspective generates a richer picture of the dynamics of both governance mechanisms and their interplay.

The empirical findings also show that inter-organisational governance combinations over time are dependent on previously deployed governance interplays. This means that both contractual and relational governance move with a limited degree of freedom along the inter-organisational relationship. For instance, once a complex contract has been established at the outset of the relationship, its importance only changes marginally. The creation of relational governance, through the use of boundary-spanning individuals, may facilitate the solution of relationship problems during later project phases as thereby the contracting parties are able to build up a reservoir of goodwill trust based on previous events. However, in contrast to
contractual governance, relational governance based on such relationships can easily diminish once an individual leaves the project and rebuilding these relationships is a slow sequential and incremental process.

Mapping contractual and relational governance combinations onto a 3x3 matrix for this study resulted in nine possible governance combinations which are seen as being deployed for each individual event. However, limited distribution of the available governance combinations was detected, i.e. there were no combinations with contractual governance of low significance, across the investigated cases, which underlines the significance of contracts throughout the relationship. In eliciting the paths of governance combinations and the fact that these combinations are limited across the cases, the findings have also revealed the impact of governance trajectories on the overall performance.

Further contribution to theory from this research relates to the dynamics of governance combinations and their impact on overall performance. The results illustrate that worse performing cases exhibit only a limited set of governance combinations with a focus on high contractual governance combined with low to medium relational governance. In contrast, better performing cases deploy a wider set of governance combinations which are centred on medium to high contractual governance combined with medium to high relational governance. In other words, partnering organisations in better performing cases apply a range of different governance combinations and tend to move across these more easily as they are able to adjust to the various events across the relationship. Moreover, the better performing cases emphasised the importance of establishing relationships between boundary-spanning individuals so as to couch the contents of ongoing contract negotiations or any variations to existing contracts appropriately. Furthermore, relationships between boundary-spanning individuals lead to positive relationship effects such as a higher degree of relationship-specific information sharing and a flexible approach to solving relationship problems.
7.2 Practical Implications

Based on this research study, the following practical implications have emerged.

*Contractual capabilities combined with relational governance*

In managerial terms, for long-term supply arrangements, evidence has emerged that contractual governance capabilities should be seen as a crucial, but not sufficient ‘qualifier’ for effective exchange and therefore they need to be enacted in combination with pro-active relational governance. Whilst the importance of contractual governance is evident across the project phases, better performing cases are characterised as having boundary-spanning individuals, leading to an increased level of information flow. Moreover, the bid/contract negotiation phase is crucial for learning about each other and for encouraging the formation of trusting relationships. These contract negotiations should focus on clarifying assumptions and expectations regarding the long-term relationships, rather than merely on the establishment of contractual safeguards. Managers involved in long-term supply arrangements, such as the investigated Public Private Partnerships, should possess sufficient understanding and capabilities of legal terminology to be able to interpret the legal clauses and procedures set out in the contract. In addition, these capabilities should be combined with relational governance activities, such as facilitating the formation of inter-personal trust through boundary-spanning relationships.

*Boundary-spanning individuals*

Establishing boundary-spanning relationships appeared to be very effective in developing relational governance and contributing to problem solving in a timely manner. Moreover, the formation of boundary-spanning relationships at the outset of the relationship yielded positive results, leading to increased information sharing and joint problem solving. The research findings also drew out difficulties in maintaining vital boundary-spanning relationships. However, simply developing inter-personal trust may not be sufficient to establish a trusting relationship. That is, the level of positive performance implications generated from developing inter-personal trust depends not only on establishing boundary-spanning relationships among individuals, but also on translating these relationships into inter-organisational frameworks. Such frameworks could overcome the fragility of individual
relationships by incorporating, for instance, information exchange procedures. Thus, a central focus of managers should be concerned with the maintenance of interpersonal relationships and their translation into inter-organisational frameworks.

Simplified working documents

The better performing cases deployed a simplified contract version for day-to-day operations. These working documents proved useful in clarifying recurring relationship-specific problems and providing managers of long-term supply arrangements with a brief version of the complex contracts. These documents, where they existed, were mostly established by individual project managers, who needed to refer to specific clauses on a day-to-day basis. In other words, such phenomena are individually tailored non-legal documents, containing extracts of the most commonly used contract clauses and procedures which are needed on a day-to-day basis. Their conciseness allows managers to refer to the appropriate clauses and procedures quickly, instead of having to work through the hundreds of schedules and procedures contained in the original complex contract.

Contract functions and ongoing contract variations

With regards to the regular changes in key personnel in extended supply arrangements, the contract and ongoing contractual refinements are a basis for building and re-building trust. The contract may also function as a vehicle for capturing and retaining relationship-specific learning and knowledge. In contrast to individual team members, contractual documents reflect a more lasting knowledge repository. Moreover, once inter-organisational information and knowledge has been codified in contractual terminology, the contract can function as a tool which reflects existing relationship-specific knowledge. Additionally, the contract may also be interpreted as a sign of commitment to the long-term nature of the relationship. That is, contracting parties which invest time and financial efforts to draw up a complex contract are signalling their commitment to the long-term relationship. Further, investments in ongoing contract variations reflect a long-term relationship outlook.
Governance combinations and impact on overall performance

Whilst the worst performing cases deployed a narrow set of governance combinations, the better performing cases applied a wider set of governance combinations during the relationship. This finding suggests that managers should apply contractual and relational governance mechanisms in a complementary fashion. In addition, efforts should be made to ensure that both inter-organisational governance mechanisms are balanced throughout the relationship phases. In this context, the research results showed that whilst there was naturally a high emphasis on contracts during the bidding and contract negotiations phase of a project, also building up boundary-spanning relationships at this stage proved vital to the overall performance.

7.3 Reflections on the Research Limitations

Having highlighting the key conclusions derived from this study, it is important to reflect upon the work’s limitations that need to be taken into account when considering the findings and conclusions. However, some of these limitations can be seen as fruitful avenues for future research under the same headings.

Wider network and stakeholders

One conceptual limitation concerns the unit of analysis. The primary unit of analysis, the dyadic relationship between the private and public organisations was chosen because of a number of advantages that can be provided by adopting this perspective, such as being able to focus on governance mechanisms in a long-term public-private relationship. However, the dyadic relationship is embedded in a wider network incorporating various stakeholders, including: government departments, lawyers, consultants and advisors. Consequently, the full complexities and dynamics of the network have only been partially uncovered in this research.

Case selection

In this study, the selection of cases was based on theoretical considerations, whereby all six cases offered the opportunity to investigate inter-organisational governance over an extended time period in buyer-supplier relationships. Moreover, the empirical focus on Public Private Partnerships offered an opportunity to collect
further secondary data which was available in the public domain. In this vein, a variety of reports on PPP and PFI related issues are published by the National Audit Office, H.M. Treasury and similar public advisory bodies. However, the data collection for the investigated was limited to interviewees’ detailed descriptions of contractual documents as contractual documentation for all six cases could not be accessed due to confidentiality reasons. Moreover, interview data was collated with secondary data describing contracts in Public Private Partnerships such as H.M. Treasury’s reports on standardised PFI contracts (H.M. Treasury, 2004 and 2007). These reports outline various contract terms and clauses ranging from service availability to performance monitoring to price and payment mechanisms in the standard PFI contract versions 3 and 4 which have been used for more recent PFI health infrastructure projects in the UK. The empirical focus of this study, Public Private Partnerships in the UK, suggests that these relationships require a strong alignment between contractual and relational governance mechanisms. This is further pronounced by the exogenous legal frameworks such as European and national procurement laws which include extensive regulatory frameworks. That is, the rigid and prescriptive regulatory frameworks, as found in all the investigated cases, further underline the legal requirements, which manifest themselves in large numbers of performance clauses and prescriptive regulations.

The results must also be considered within the context of the sectors and the country analysed. That is, the study was designed to examine the dynamic interplay of governance mechanisms within public-private arrangements in the United Kingdom. Whilst there is no apparent reason why governance dynamics in the analysed relationships would not hold outside of the investigated sectors within public-private arrangements, further studies could examine other sectors such as transport and education. However, in the context of this research, exogenous legal frameworks such as European and national procurement laws, which include extensive regulatory frameworks, need to be taken into consideration for the chosen case studies. That is, the rigid and prescriptive regulatory frameworks, as found in all the investigated cases, underline the legal requirements, which manifest themselves in large numbers of performance clauses and prescriptive regulations. Considering the myriad of extensive regulatory and legal frameworks, contractual governance was expected to feature heavily in these relationships. Other case study sectors may face different
exogenous legal frameworks that differently impact on both governance mechanisms and their interplay. In this study, the selection of cases from three different sectors has presented a mixture of project characteristics, such as contract value and market maturity and has offered an opportunity to investigate findings across sectors. The results of the research would appear to be robust and hence analytical generalisation from them is valid. However, replication of the test for more cases in the researched sectors and countries would prove valuable in further substantiating these findings. Moreover, extending such an investigation to other organisations in different sectors and countries may make the results of this study more robust.

**Relationship context**

A classic problem faced in interview-based research is reflexivity, where the researcher may impose his or her meanings into the research setting and hence invalidate the results. Public-private arrangements are highly politicised projects and hence to address the reflexivity issue the research design and questions were constructed so as to avoid ‘tapping’ into a politicised discussion about the wider policy issues of PPP and PFI projects where possible. Moreover, the design allowed for multiple perspectives on the concepts presented in the conceptual framework and the research questions. The research incorporated interview data from both public and private organisations regarding the dyadic relationship and secondary data such as firm documents and government reports.

**Dynamics**

In this research study, inter-organisational relationships were described as a process, incorporating critical events along the project life cycle. As a process, timescale is an important element. Although there was no intention to illustrate relationships as a staged process, each case study represented the investigated public-private relationship at a particular point in time. As a result, with the relationships and governance mechanisms being dynamic, this research does not claim to reflect accurately the current status quo of the individual public-private relationships in the investigated partnerships and in any case this was not the objective of the study.
Operationalisation of constructs

Contractual and relational governance constructs were operationalised along the identified critical events in the supply relationship. Critical events were limited to seven events for each individual case (five critical events in the Oxford Hospital case) in order to collect a rich data set for each one identified. Moreover, the events that were self-selected by interviewees were chosen because they were considered to have had a significant impact on the overall supply relationship. Collecting relationship data retrospectively to cover relationships spanning up to twelve years introduces a degree of time lack for past events. Therefore, empirical data on contractual and relational governance mechanisms for each event and on overall performance was collected from both the buyer and supplier sides and further strengthened by secondary data.

In addition, considering the different characteristics in terms of, for instance: contract value, project complexity and buyer and supplier team sizes, the number of interviews differed across the investigated cases. In this context, whilst the Swindon Hospital case was managed by buyer and supplier teams consisting of a project director and various project assistants, both the buyer and supplier teams in the Gloucestershire Fire and Rescue Service case consisted of an individual project director with little further assistance.

7.4 Further Research

This research study has explored and examined a number of issues of importance, regarding the dynamics of inter-organisational governance in long-term supply arrangements and the findings have opened up a number of potential avenues for future work in this field.

Further testing of concepts and framework

A first future research avenue would be to build on the conceptual lessons from this thesis and by doing so refine the conceptual structure. In this regard, in future studies the newly proposed conceptual framework provided in this study could be expanded to include additional concepts that might affect the dynamic interplay of governance mechanisms in long-term inter-organisational relationships. For instance, the exact
content of contract clauses and their impact on inter-organisational governance interplay could be investigated. More specifically, future research could explore the intention behind the drawing up of specific contractual clauses and how these clauses are operationalised over time. This research study has focussed on the interplay of contractual and relational governance mechanisms in buyer-supplier relationships. Therefore, further research studies could investigate other governance mechanisms, such as ownership arrangements, power or goal congruence, both individually and in combination, to see how they impact on overall performance over time.

Studies on trust mostly assume that trust between exchange partners is symmetrical, that is, the extent of trust is assumed to be the same for both partners in a dyad. However, Zaheer and Harris (2006) argue that symmetric trust alignment may not be that common, because the bases for trust to develop may differ between the partners. For instance, trust asymmetry may arise from the presence of greater vulnerability of one party in the dyad and hence it is closely related to notions of power and resource dependence (Zaheer and Harris, 2006). Therefore, trust asymmetry in a dyadic relationship may influence the establishment of inter-personal and inter-organisational trust and the interplay of governance mechanisms over time. For instance, when considering the different bases of trust, Lui and Ngo (2004) split inter-organisational trust into competence-based and goodwill-based forms. That is, they argue that both trust types impact differently on the interplay between safeguards and performance. Further research may consider the different bases of trust and their impact on the interplay between contractual and relational governance over time. In addition, this study empirically explored the role of inter-personal trust in facilitating the formation of inter-organisational trust. Thus, further research could explore the empirically under-researched influence of inter-organisational trust on the formation of inter-personal trust between boundary-spanning individuals.

Through the research into the interplay between contractual and relational governance four identified governance components were identified: complex contracts, intermediate contracts, inter-organisational trust and inter-personal trust. In addition, in this research study a simplified, compound performance measure was deployed. Further research could investigate the impact of the four elicited governance components on various types of performance outcomes, such as
innovation. Through such work, it could be ascertained whether the governance components and their interplay hinder or enhance service, product and process innovation.

Addressing future research from the perspective of other relevant theories that have not been included in this study could provide an additional avenue. In particular, the developing areas of supply networks and the theories behind network thinking, such as the extended resource-based view, which formed the foundation of much recent research in the field of operations management, could prove a useful departure for alternative theoretical foundations.

Alternative research methods

Subsequently, the conceptual structure derived in this thesis could be operationalised and used to formulate a number of propositions. Moreover, whilst this research employed an exploratory case study approach, which was deemed suitable from both the theoretical and methodological viewpoints, fruitful further study could be undertaken by extending investigation to a wider cross-sectional study in the form of a survey. The study was based on a primarily abductive research process to allow the consideration of existing constructs and variables, while at the same time being open to new definitions grounded in the detailed set of data emerging from the fieldwork. In addition, this research did not have the intention of seeking to examine a set of hypotheses and rather it has sought to explore the dynamics of inter-organisational governance in supply relationships. Future research could deploy a structured questionnaire, the responses to which could subsequently be analysed and used to give further validation to results of this research.

Comparative studies

This research study was primarily based in the UK and hence the investigated public-private supply arrangements were influenced by the inherent legislature and policy context. The augmentation of public-private arrangements in Europe, Australia and North America would provide opportunities for comparative studies. More than one thousand PPP contracts have been signed in the European Union (EU) in the last 15 years, representing a capital value of nearly 200 billion Euros (Blanc-Brude et al., 2007). Therefore new research should test the empirical findings beyond the UK
context and open up the opportunity to compare the impact of different legal systems on the formation of contractual and relational governance in inter-organisational relationships. In other words, comprehension of governance mechanisms at the international level resulting from appropriate research would prove beneficial to the field.

In the same vein, future research involving a variety sectors could prove fruitful as it would allow for the investigation of the effects of context differences. Additionally, expanding the research study to sectors beyond the three investigated sectors would provide valuable comparative data for drawing conclusions across industry boundaries. Further research could also investigate how different environments affect the dynamics of contractual and relational governance in inter-organisational relationships. For instance, limited research has explored the role the institutional context plays in the formation of trusting relationships between individuals and organisations. That is, socio-cultural values, industry norms and national cultures may have an impact on the formation of trusting exchange relationships. For example, Dyer and Chu (2000) show that antecedents of trust in buyer-supplier relationships differ depending on the national culture.

Different relationship characteristics

It would prove useful to extend the application of the conceptual framework developed in this research to other types of relationships, so as to both expand its applicability and explore the emerging patterns of governance interplays across inter-organisational relationships. In this regard, one future research avenue would be to examine the constructs discussed in this study on governance dynamics in inter-organisational relationships, by extending the scope to include: (i) divergent product/service mixes, (ii) short-term relationships as opposed to the investigated long-term relationships, and (iii) relationships consisting of a private supplier and private buyer, in contrast to public-private arrangements. In particular, a focus for future research could be the exploration of inter-organisational governance dynamics in short-term supply relationships, to see whether relationship duration has an impact on the dynamic interplay of inter-organisational governance and the formation of the governance components.
REFERENCES


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APPENDICES

Appendix A - Publications

Selected parts of the theoretical and empirical underpinnings of this research have been published in peer-reviewed journals and book chapters.

Journal articles


Refereed book chapters

Appendix B - Interview Guide

Thank you for agreeing to take part in this research study based at the University of Bath, School of Management, in the Centre for Research in Strategy Purchasing and Supply (CRiSPS). The following interview questions represent an interview guide to steer the data collection period of the research and to ensure consistency and validity across the investigated cases.

The position and name of the interviewee will be recorded, but confidentiality should be respected at all times.

**Organisation:**

- **Name:**
- **Position:**

- **Contact details (tel./email):**
- **Date/time:**

**Interviewee’s background information**

- What is your role and responsibility in the organisation?
- For how long have you been in the current position?
- What is your role in this PFI project?
- Did you have any previous involvements and/or experiences with PFI projects in the same and/or different sector?

**Organisation’s background information and PFI project characteristics**

- What are the organisation’s responsibilities? (Prompt: e.g. planning, collection and disposal authority)
- What is the organisation’s role in this PFI project?
- Please describe the history of this PFI project?
- Who are the key stakeholders and their roles in the project? (Prompt: private organisations, e.g. construction company, banks, and public organisations, e.g. PFU, DoH)
What are the specifics of this PFI project? (Prompt: sector specifics, e.g. waste composition, waste hierarchy, percentage of landfill/recycling/incineration)

Which changes in policy and supply market environment influenced this PFI project? (Prompt: legislation/directives such as EU landfill and WEEE)

Why did your organisation decide to procure the project through the PFI route?

Which alternative procurement routes did your organisation explore?

What is the contract duration?

How long is there left to run on the current contract?

How would you describe the primary public-private relationship? (Prompt: frequency of communication, breadth of communication, confidence in the reliability of partner’s promises)

What are the major concerns/uncertainties in managing long-term contracts?

**Contractual and relational governance at the bid/contract negotiation phase**

Please select two critical events during the bidding and contract negotiation phase and describe the use of contractual mechanisms and relational mechanisms (prompt: concession agreement, 3rd party involvement (e.g. lawyers); regular meetings, inter-personal relationships; role of public and private organisation)

**Contractual and relational governance at the build phase**

Please select two critical events during the build phase and describe the use of contractual mechanisms and relational mechanisms (prompt: concession agreement, 3rd party involvement (e.g. lawyers); regular meetings, inter-personal relationships; role of public and private organisation)

**Contractual and relational governance at the operate phase**

Please select three critical events during the operate phase and describe the use of contractual mechanisms (prompt: service level agreement, schedules and procedures, contract variations; benchmarking exercise) and relational mechanisms (prompt: informal meetings, inter-personal relationships, trust, information sharing)
Overall performance

Please indicate your satisfaction with the overall performance on this scale ranging from 1 – very poor to 5 – very good

1 – Very poor
2 – Poor
3 – Mediocre
4 – Good
5 – Very good

What are the current operations and performance outcomes and measures for this PFI project? (Prompt: on time measures for bid/contract negotiation and build phase; budget measures for overall project)

Have there been any changes to these performance measures over the project life cycle?

Future challenges

What are the future challenges this PFI project faces?

Additional information

Is there anything else you would like to add or clarify?

Could you please point out any additional information that would support my research project? (Prompt: e.g. company documents; government reports)

Please advise if other organisations and/or individuals involved in this project will be able to provide additional responses to some questions.

Contact Information:
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Claverton Down, Bath BA2 7AY
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fax: +44 (0) 1225 383 223
Email: j.roehrich@bath.ac.uk
## Appendix C - Record of Fieldwork

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<td>General Manager</td>
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</tr>
<tr>
<td>28.02.06</td>
<td>Director of Business Development</td>
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</tr>
<tr>
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<td>Manager - build phase</td>
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<tr>
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**Emergency Services – South Wales**

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*Some interviews were conducted with another researcher present*
Appendix D - Examples from NVivo

Project folder Swindon Hospital
Excerpt of PhD project tree nodes
Appendix E - Case Timelines

The following case timelines are presented in the order of the case studies in the healthcare, waste management and emergency services sector:

- Swindon Hospital
- Oxford Hospital
- Kirklees Waste Management
- Surrey Waste Management
- Gloucestershire Fire and Rescue Service
- South Wales Fire and Rescue Service
"[...] 35 variations in the last 6 months of the build phase."

The Trust wanted to have a number of 30 odd variations to the hospital building 5-6 months before service commencement [...] we sat down with the Trust and the lawyers to accommodate that and we could actually undertake these variations without it impacting on completion. Again it had to have willingness on both sides to make the thing work, otherwise we could have just said no, you give me an extension of time or no we are not going to do this.

"[...] some of the requirements are too practical and undeliverable [...] and we are going through the portering performance management services to make it deliverable within the contract, because, for example, the porters are doing 21,300 jobs a month. If you have more than 10 failures in 21,000 jobs you could be in service provider replacement which is not really good [...]"

"[...] the Trust is not very good at acknowledging when the situation changes. So this is our deemed service variation and we will be submitting the claim under deemed variation procedure in the contract where the Trust has not informed us [private supplier] of changes to activity. We have to effectively find out for ourselves which I did not think is a very good arrangement [...]"

"[...] I think that the Trust’s FM Director is very much interested in saying, ‘I do not have any money so do not ask me for any. That is not my problem. That is fine. I will just stop doing the work that I should not be doing [...]’"

"[...] so we need a formal process and that is fine, but the Trust is very good at not coming to a conclusion on things. We believe that we [private supplier] need to bring them to the table to engage with us and say it right. We need to take this forward. They are very good at not doing things to schedule. We are on the tenth version of our change proposal [...]"

"[...] 275 Bid/contract negotiation phase vs. Operate phase"

Oct 2002 OJEU

Dec 2003 Financial close

Dec 2006

Dec 2011 Benchmarking

"There were a few variations necessary [...] which needed to be reflected in the contract [...]"

"I would just walk down a corridor and talk to someone, not ringing up or just suddenly sending a communiqué that says you are not meeting the contract."

"[...] the original members of the team that bid were not the ones that closed. The ones that closed the transaction are still there and actually running the deal now."

"[...] there was a lot of pre-financial close initiative with the link corridor [...] this long corridor connecting the old to the new hospital and it is really big in use to control infection etc. [...] at the moment, the link corridor there is one level for public, there is one level for clinical staff and there is one level for service providers."

Mohilisation period
"[...] we knew how much we could afford to spend, but they [private supplier] were still trying to sell us more [...]"

"[...] then you get to the stage where you are getting into harder contractual negotiations and the relationship becomes a little more strained then you get the lawyers in and it is extremely formal and distant."

"[...] the contract negotiations were though, but fair [...] and we reached a point where we started working together to deliver this partnership [...]"

"[...] some contract variations were necessary during the build phase [...] but I think this is very common in the early project phases."

"[...] you get to the operational phase where you need to make it work on the ground and it is very much about inter-personal relationship [...]"

"[...] regular meetings among senior and operational personnel helped to keep the relationship on track [...] and meetings helped to resolve some minor hiccups during the early phases."

"[...] it was a good relationship. We found offices for the private supplier in the town centre. They paid, but we rented them some council buildings and we worked very closely together. [...] We had regular meetings and targets had to be set. We tried to build up trust, because that is important in any relationship."
"[...] the contract alone includes 150 pages of waste terms definitions. When should I ever find time to read these? [...]"

"[...] we had a lengthy and costly planning process for a new EfW plant [...] and it was all about contract negotiation."

"[...] they [public buyer] had not received any formal contract training [...] and they always had to refer back to their lawyers."

"[...] we had to renegotiate some of the contract terms after missing the recycling targets [...] we also had to include an updated project timetable."

"[...] we had to realistically approach the contract [...] and say what we could afford in terms of a new treatment plant [...]"

"[...] DEFRA told us that we have to demonstrate that things can be turned around or there is a possibility of funding being pulled out of the project [...] it was taking us too long to establish new facilities to divert municipal waste from landfill."

"[...] we had to realistically approach the contract [...] and say what we could afford in terms of a new treatment plant [...]"

"The contractor was very knowledgeable about the different treatment technologies and we had some very productive meetings [...]"

"In retrospect, we have been rushed into the contract [...] we should have made sure there was a definite planning permission for the new EfW plant."

"Our monthly senior management meetings are helpful and necessary to address any unresolved issues left over from the day-to-day interaction between our operational people [...]"

"We suffered immense knowledge drain as half of the project team left during the early phases."

"There was no effective communication between us and them [...] Partnership? I do not know what this really means."

"Half of the council’s project team, including the project director, project manager, finance officer etc. left soon after the contract was signed."

"[...] meetings were crucial to identify shared objectives and formulate strategies and policies, raising the profile of relevant waste issues at the relevant level and across professional disciplines within the council, developing agreed communication and information strategies and policies across both organisations."
“[…] we did realise right from the start that we needed to invest resources up-front to get the output specification right […] we did not want to loose a lot of time and money because we did not get it right the first time […]”

“[…] we got our lawyers in and started on the specifications […]”

“[…] it was very important to be commercially minded right from the start, but also to understand that you are probably end up working with [the private partner] for over 25 years […]”

“[…] it was vital to spend enough time at the outset of the contract negotiation phase to understand each other point of view, but we did not want to end up wasting months and months on negotiating the contract […]”

“[…] regarding 3rd party income generation, we needed to refer to the contract and emphasise within the contract what [the private supplier’s] obligations are […]”

“[…] we had put in place regular meetings between senior personnel to ensure constant progress and to occupy the training centre on day one […]”

“[…] regular meetings among senior personnel was most helpful to address relationship difficulties […] it was also helpful to get to know your counterpart and to see them face to face […]”

“[…] we did not have many arguments during the build phase, because being straight with each other, saying this is what we need, was been the way forward […]”

“[…] it was very important to maintain a good working relationship between both parties […]”

“[…] we have to work together with our partner and consider bringing in more money from outside […] offer courses to non-uniformed personnel and companies to generate an appropriate level of income for the training centre […]”

“[…] we needed to change the way we work and develop the relationship further. Almost pushing the boundaries.”

“[…] and it is important to maintain a good working relationship between both parties […]”

“[…] we hired a new liaison manager […] a non-uniformed manager to be a ‘gate-keeper to turn culture’ […] we need someone who is familiar not just with uniformed officers, but has experience in dealing with commercial organisations and 3rd party involvement […]”

“We [public buyer] needed to reflect changes in the relationship and variations to the building in the contract […] thus leading to contract renegotiations before we opened the facility […]”

“[…] we need to change the way we work and develop the relationship further. Almost pushing the boundaries.”

“[…] it was vital to spend enough time at the outset of the contract negotiation phase to understand each other point of view, but we did not want to end up wasting months and months on negotiating the contract […]”

“[…] we got our lawyers in and started on the specifications […]”

“[…] it was very important to be commercially minded right from the start, but also to understand that you are probably end up working with [the private partner] for over 25 years […]”

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“[…] we need to change the way we work and develop the relationship further. Almost pushing the boundaries.”

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“[…] we got our lawyers in and started on the specifications […]”
Appendix F - Figures for Event Type Paths

The following figures illustrate the event types’ paths and their impact on governance combination for the remaining six event types across the investigated cases explained in sub-section 5.2.4. The figures represent the following event types: external change, regular meetings, seminar, team co-location, contracting work and operational problem.

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**Figure 57**  External change
Relational governance

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Contractual governance

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**Figure 58** Regular meetings

Relational governance

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Contractual governance

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**Figure 59** Seminar
Figure 60  Team co-location

Figure 61  Contracting work
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**Figure 62** Operational problem