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Managing Public Private Partnership (PPP)
Infrastructure Projects in Jordan

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ABSTRACT

Public Private Partnerships (PPPs) are increasingly being utilised internationally as new avenues for providing goods and services to the public with over 1,100 projects worth US$ 450 billion built around the globe between 1985 and 2008 (Siemiatycki, 2010). However, managing PPPs, particularly in the implementation phase, is both theoretically and practically complex with success largely determined by how well partnerships are managed (Grossman, 2010). Yet, PPP scholars (e.g. Bach & Whitehill, 2008; Jones & Noble, 2008) have noted that little is known about managing PPP arrangements and have called for further research to understand the ‘black box’ of PPPs (Weihe, 2008). The current research is significant in elucidating this ‘black box’ and in analysing management challenges that partnerships experience in the implementation phase. Inter-organisational relationships (IORs) and inter-organisational culture (IOC) have been identified as closely related to the PPP research and are utilised within this research to provide important insights into understanding the management of PPPs in the implementation phase.

This research examines PPPs in the Jordanian context; one of the newer but most common users of PPPs in the Middle Eastern region, where PPPs are of economic strategic importance and entail significant investment risk (El-Khatib, 2008). Specifically, the current research explores ‘How effectively managed is the implementation of PPP infrastructure projects in Jordan?’ This question is explored through perceptions of PPP managers within two Jordanian case study organisations. The intention is to critically analyse how PPPs should be managed in order to contribute to the development of what might be regarded as universal theory of PPPs that can be tested, applied and generalised to other contexts. To achieve the objectives of this research, an exploratory, ontologically-oriented, qualitative research design was utilised. Data were collected from 21 in-depth, semi-structured interviews with selected informants at the senior managerial level representing different partnering organisations. Content thematic analysis was used to analyse interview data and documentary data.

Extant research on PPPs has suggested that when two organisations, representing different institutional and cultural backgrounds form a PPP arrangement, conflicts between partners are likely to occur and result in consequent PPP failure. The current
research suggests that the way in which a PPP project is managed, and the extent to which IORs and IOC between collaborating organisations are handled, has substantial impact on the final outcome of a PPP. The findings identify and analyse a number of PPP management practices, competency requirements and management controls that were closely linked to effective PPP management. Despite the institutional differences and management difficulties confronting managers in managing the implementation phase of their PPPs, it is suggested that a number of built-in safeguards and strategies that they adopted limited the impact of these differences and the difficulties. Further, the study concludes that the Jordanian PPP partner managers experience strong and effective IORs, through establishing a range of approaches to ensure steady and consistent progress of their PPPs. Examples of these approaches include: considering the project agreement as regulator of their formal IORs; working closely and continually; engaging third-parties; and learning by experience. Despite the culturally incompatible aspects that exist between partnering organisations (such as management approaches, focus and orientation that each partner exhibits), PPP managers are able to limit or neutralise the negative impact of, and deal effectively with incompatible aspects. It is concluded that the framework for a positive relationship environment (PRE) outweighs the IOC differences and challenges facing PPP managers.

The research makes an important theoretical contribution to PPP research in providing a detailed analysis of effective PPP management practices, difficulties, institutional differences, competency requirements and monitoring techniques, which had not been systematically explored in extant PPP research. Additionally, the research can be regarded as pioneering in utilising literature on IOC as a contextual framework to explore the management of PPPs. Further, the research is significant in exploring the emergence of IOC in a PPP environment that is different from other organisational cultures previously theoretically described. Additionally, this research provides a basis for researchers to revise their assumptions about the nature and impact of PPP institutional differences, management difficulties and nature and management of IORs and IOCs. For practitioners and policy makers alike, knowledge of PPP management provides a greater understanding of how partnerships (especially those that involve international partners) should be effectively managed. This knowledge will assist to minimise loss of investments in such projects worldwide, particularly in developing economies such as Jordan, where resources are scarce.
STATEMENT OF ORIGINALITY

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no other material previously published or written by another person except where due reference is made in the thesis itself.

Ali Mistarihi
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CHAPTER 1: INTRODUCTION: FOCUS & CONTEXT OF THE STUDY

1.1 FOCUS OF THE STUDY

1.1.1 Overview

Public Private Partnership (PPP), also known as P3s and Private Finance Initiatives (PFIs), have developed in a number of countries in recent years and become important alternatives to the traditional approaches of public service production and delivery (Cuttaree, 2008; Webb & Pulle, 2002). It is anticipated that PPPs will continue to expand over the next decade and become a significant part of public service production and procurement (Klijn & Teisman, 2000). Pressures from citizens, stakeholders and civil society organisations on governments and private sector corporations for more cooperative activities have recently increased as part of the commitment to social responsibility of private and public sector organisations (see also, LaFrance & Lehmann, 2005).

Internationally, the years between 1985 and 2008, over 1,100 projects worth 450 billion USD were built around the globe using different forms of PPPs (Siemiatycki, 2010). In the UK, in 2010, for example, the investment made using PFI has exceeded a combined capital value of £200 billion (Read, 2008; City & Financial, 2010). As such, special government agencies and departments have been formed in a number of countries to facilitate the expanded use of PPPs (Siemiatycki, 2010).

A precise definition of what PPP entails is difficult to achieve as the term has involved different forms and partners, has been interchangeably used with other forms of public service delivery, has lacked an agreed-upon vocabulary for describing different cooperative efforts, has been addressed from multidisciplinary backgrounds, and the precise boundaries of the PPP field are still emerging (Hodge & Greve, 2007; Neal, 2010; Schaeffer & Loveridge, 2002; Siemiatycki, 2010; Vining & Boardam, 2008). Nevertheless, PPP entails a long-term business collaborative relationship between public and private sector organisations to provide a service or a good to the public, in which responsibilities and benefits are shared between them. Indeed, both partners have their own rationale to join a partnership arrangement. Consequently, a range of PPP
forms and modalities have been created to meet the objectives of each partner in a partnership arrangement, which progresses through a multi-stage developmental process. The main focus of the current research is on the implementation phase of a PPP lifecycle. More specifically, the management of the implementation phase (i.e. during the construction and the service delivery stages), as this is the phase during which partners work closely in practice and the management of the implementation phase is assumed to determine the final outcome of the partnership.

As a phenomenon, PPP has been described as problematic and complex (Klijn & Teisman, 2003; Mann, Pier, & Yasin, 2007; Webb & Pule, 2002). The design and the management of the implementation phase of a PPP arrangement is usually very complicated and potentially fraught with difficulty (Bridgman, 2003; Teisman & Klijn, 2002; Webb & Pule, 2002). Consequently, the PPP phenomenon has been framed and conceptualised in contrasting ways (Siemiatycki, 2010; Unwin, 2005), thereby adding more challenges to the complexity of what should be effective management practices. It has been noted in reviewing PPP literature that partners (i.e. public and private) still seem to be dedicated to their divergent procedures, rules and interests during PPP implementation. They bring their own differing perceptions and strategies into the partnership, and therefore, add more complexity to understanding and managing PPPs. The details of these objective functions are important, because they “foreshadow the reasons for conflict and high transaction costs” (Vining & Boardam, 2008).

Complexity in the management of PPPs stems from several ‘actors’ being involved, with divergent perceptions, decision approaches, solutions and a variety of resources that should be combined and injected into the partnership (Teisman & Klijn, 2002). Furthermore, partnership arrangements may disguise complex imbalances in coordinating responsibilities and accountability among partners (Bridgman, 2003). The institutional fragmentation of PPP projects can also “create enormous barriers, enhance the complexity of decision-making and calls for a huge managerial effort” (Klijn & Teisman, 2003 p. 142). These complications can have substantial consequences for the way PPP projects are managed and, as a result, impact on the overall performance, success or failure, of a PPP project (see also, Weihe, 2008). If a PPP is poorly managed, due to deficiency in management competency, this most probably will result in its failure, and thus, a huge waste of investments for both partners.
Because the PPP literature does not provide a comprehensive and coherent view to understanding the complexity of PPP as a phenomenon, and the details of the partnership process during its implementation (Weihe, 2008), this research utilises other theoretical frameworks in related literatures to support its arguments. Namely, previous research on inter-organisational relationships (IORs) and inter-organisational culture (IOC) has been used in the current research as it relates to PPPs. Indeed, literature in this field of research has been described as fragmented and established theory or sets of theories have not existed yet to help scholars and practitioners cope with, understand and handle the complexities that are involved in the management of a PPP in its phase of implementation. In addition, literature reviewed in the field of research reveals essential gaps that are mainly related to the management aspects of a PPP during its phase of implementation. More specifically, gaps in knowledge about the effective management practices required in managing a PPP project and in understanding the nature and the management of partners’ inter-organisational relations, and the inter-organisational culture that exists between their organisations.

This research was conducted in Jordan because Jordan is considered one of the main users of PPPs relative to other Middle East and North African Countries (MENA)\(^1\), and very little research has been conducted on PPPs in this region. In addition, PPPs are of economic strategic importance to Jordan; however PPP investment entails significant risk for a developing country with small economy such as Jordan. PPP projects, if poorly managed, are more likely to result in potential failure and consequent waste of huge investments, especially in developing countries like Jordan, where resources are scarce and failure of such projects will substantially affect the whole developmental processes that these countries are undertaking. Further, PPPs are newly introduced to the Jordanian market and much needs to be known about the management of these arrangements in this country. The lack of knowledge in managing the implementation of PPP projects would most likely result in failure of these projects, and therefore, waste of precious resources that could have been utilised in other areas of development in the country. This is why there is a genuine need to understand how the implementation phase of a PPP project is (and should be) managed, in order to be able to improve

\(^{1}\) MENA include 13 countries, namely, Jordan, Lebanon, Syria, The Palestinian Authority, Egypt, Algeria, Tunisia, Libya, Morocco, Kingdom of Saudi Arabia, Kuwait, Qatar, Bahrain, United Arab Emirates (UAE), Oman, Yemen and Iraq.
practitioners’ and scholars’ knowledge in this important area, and hence, improve managerial skills in managing PPP projects more effectively.

This chapter (Chapter 1) provides the foundations for the current research. It sets the direction of the research and provides an overview of its focus and context. This chapter consists of two main sections (see Figure 1.1). The first section presents an overview of the focus of the study including its purpose, conceptual definitions and perspectives, background literature, research problem, questions, methods and delimitations. The second section provides an overview of the context of the study, including Jordan’s historical, political, social, cultural and economic background and the significance of conducting this study in Jordan.

**Figure 1.1: Chapter 1 structure**

### 1.1.2 Purpose and Contribution of the Study

There is ample evidence that PPPs have been widely used internationally, and will continue to be used in the future as an important avenue available to governments around the globe to deliver public services and goods. This is evident from the huge investments in PPP worldwide, as well as in Jordan. Research has suggested that there
is a critical need to review the experience of PPPs internationally by gathering evidence from different countries to better grasp what a PPP is and how it should be understood and managed (Hodge & Greve, 2007) (see also Figure 2.19). In understanding how effectively managed is the implementation phase of PPP infrastructure projects in Jordan, this research builds on earlier research efforts collectively in the field in attempting to contribute to building a PPP theory (see also Figure 2.11). More specifically, this research aims to explore the requirements for effective PPP management practices in such hybridised and multi-sectoral arrangements, the problematic issues facing the implementation of PPP projects, the management expertise and competence required, and the controlling mechanisms that are most needed to manage these projects. The current research also aims to examine the inter-organisational relationship management approaches that partners follow to address and handle their matters of concern and manage their interests and needs. Furthermore, this study aims to examine the characteristics of the ‘inter-organisational culture’ which is assumed to emerge in conditions where two or more organisations are involved in a partnering process. Exploring this form of organisational culture will positively contribute to its development in future research and practice. Overall, the aim of the current research is to offer deeper insights into the effectiveness of managing PPP projects in Jordan during the implementation phase of their development.

The current research is one of very few scholarly research efforts on PPPs, both internationally as well as in Jordan. Internationally, research in the area of PPPs can be described as fragmented and lacking a well-established theory or set of theories that can assist in providing insights into the ongoing managerial life of such hybridised organisations (Noble & Jones, 2006), as well as a substantive, holistic view of the context in which partners operate or interact (Fischbacher & Beaumont, 2003; Klijn & Teisman, 2000). To date, much of the international research in the field has been focussed on addressing (theoretically or empirically) the case for or against PPPs, the pros and cons of this form of public service delivery, or in evaluating the policy aspects of establishing specific PPPs in their early stages of development. In Jordan, very little scholarly research about PPPs has been conducted although it is one of the most common users of PPP arrangements in the Middle East and North African (MENA) countries. Most of the small amount of research that does appear in the PPP literature has been directed towards documenting experiences of certain PPP projects and
initiatives (e.g. McKinsey & Company, 2005) and/or assessing the environmental conditions for their potential success (e.g. Al-Jayyousi, 2003). Yet, field research that is specifically and directly related to exploring and examining the challenges facing the management of PPPs during their implementation is still limited.

Therefore, the current research potentially has significant practical and theoretical implications. Practically and managerially, it can help to improve practitioners’ understanding and enhance their skills and knowledge of how well partnerships are (and could be) managed in a way that reflects on their effective performance and enhances their potential success. This research, also potentially, has very important policy implications for informing policy makers on the challenges that PPPs could face during their implementation and to improve their knowledge in making more rational policies and decisions relating to the establishment and management of PPPs. Although this study explores the Jordanian PPPs, some of the findings may be generalisable across PPPs internationally. In that sense, the current research can be considered as a new approach which attempts to provide a more detailed view of one important, though the least researched aspect, of the proposed ‘partnership model’; that is, managing the implementation phase. This investigation may contribute towards the development of a more universal PPP theory.

1.1.3 PPP Conceptual Definitions and Perspectives

**PPP Definition**

It may not be possible to trace the exact historical origins of PPPs as an alternative used by governments for the production and delivery of public goods and services, because public-private cooperation had existed in practice centuries ago (Savitch, 1998; cited in Schaeffer & Loveridge, 2002). Early reports of the concept in its ‘modern’ usage as PPP appeared thirty years ago (Rohatyn & Blodgett, 1979), although the term had been as early as 1960s. The concept was developed by a group of public and private sector representatives working together on an energy project in the United States. The idea was to run that project like a private business but still be publically accountable. As a result, the concept was offered as a practical solution to the government’s financial difficulties in carrying out too large or too risky projects.
A precise and comprehensive PPP definition is difficult to achieve as the meaning and practice of PPP is somewhat elusive, wide ranging and lacking definitional clarity (Crawford, 2003; Hodge & Greve, 2007; Neal, 2010; Teicher, et al., 2006). Many scholars in the field of PPP have attempted to define PPP through elaborating on its characteristics, and demonstrating its functions, elements, components and underlying assumptions (i.e. Bult-Spiering, 2003; McQuaid, 2000; Monsma, 2004; Pessoa, 2008; Vining & Boardam, 2008; Webb & Pulle, 2002). Other PPP scholars have distinguished between different types of partnerships according to the situations that brought partners to work together, as well as the nature and the level of the relationship itself that binds partners together in an attempt to reach a more meticulous definition of the term (i.e. Bovaird, 2004; Chang et al., 1999; Hodge, 2004; Kaul & Conceicao, 2006; Neal, 2010; Pace, et al., 2000; Schaeffer & Loveridge, 2002). Yet, other scholars have viewed PPPs in light of the differences that exist between them and networked and inter-organisational relationship (IOR) arrangements (Robyn, 2010). However, it can be concluded that there has been a fairly wide consensus among most scholars that a PPP arrangement involves some sort of cooperation, synergy and collaboration; between one or more public actors; and one or more private actors; who share resources, opportunities, rewards, revenues, benefits and joint rights and decision making, and at the same time; share risks (fully or partially), responsibilities and costs; and make use of the strengths and comparative advantage of each (see Table 2.1).

A number of PPP definitions offered by several PPP scholars were synthesised in the current research to form one comprehensive definition of PPP. The PPP synthesised definition is: a long-term collaborative and well-defined and structured relationship between one or more public, private and any/or other organisation where resources are comparatively injected into the partnership, benefits, opportunities and rewards are satisfactorily allocated and risks, responsibilities and decisions are relatively shared among partners to achieve their mutually agreed upon goals.

**PPP Forms and Modalities**

PPP forms and models were originally developed as a result of the practical need of both the public and the private sector organisations involved in the partnership arrangement to achieve their own planned objectives. It is argued that corporatisation
and privatisation allowed the private sector to become an important partner in public service delivery systems (Teicher, et al., 2006). Governments, in the other hand, have found PPPs to be new venues for policies that can help in offering new options for the production and delivery of public goods and services. Consequently, varying PPP forms and modalities have been created to satisfy different government needs and policy objectives, and at the same time, to provide incentives to the private sector to enter such partnership arrangement. As such, PPP modalities range according to what the partnership is seeking to do; who is involved; when and where the partnership is taking place; and how it is carried out and implemented (McQuaid, 2000).

In general, forms of PPPs may include functions such as: traditional lease, develop, design, build or construct, own, operate and/or maintain. A combination of these functions can result in different PPP arrangements. The most common PPP form is the one in which the government utilises the private sector for project construction and building. The private sector in turn, finds the construction process an area where it has the utmost potential to justify its involvement in the partnership. The choice of a particular PPP form depends upon factors such as the government’s objectives, the availability of finance, the nature of the project, its scope, the risks involved and the experience that the private sector can bring to the partnership.

**The Rationale for PPPs**

Understanding the details of why partners enter into partnering relationships is an important aspect of the current research. The assumption here is that the rationale for the partnership will have substantial implications and impact on how the partnership is viewed by each partner and, consequently, reflected in the way relationships are managed, especially during the implementation phase of a PPP lifecycle.

There are several reasons and benefits for both the private and the public partners to enter into partnering relationships. For the public sector, there are strengths evident in the private sector from which governments can benefit, such as: improving service quality; creating strong customer service and high management standards; efficient material-based systems; and, reduction of the project’s construction costs. Other reasons that governments use PPPs may include: value for money; risk sharing and/or transfer;
and, their political attraction. For the private sector, however, there are a number of internal and external triggers to establish partnership arrangements. Examples of the internal triggers include: ensuring the survival of the firm; increased profitability potential; lack of resources; and, the limited essential expertise and knowledge in markets and cultures. External triggers, on the other hand, include: government incentives in the form of grants and allowances; and, spreading business risks.

In order to provide a deeper understanding for the rationale for a partnership, a number of PPP scholars have offered their perspectives and views on why and how partners enter into partnering relationships. Special consideration was given to the theory of cooperation, the theory of enforced cooperation, game theory, Huxham and Vangen’s view, maintain synergistic momentum perspective (MSM) and PPP development models. These perspectives are deemed as closely related to the current research and assumed to offer further insights into the details of the management of the partnership process during the implementation phase of PPPs, particularly, in answering the question of why and how partners join partnership relations.

As regards PPP development, PPPs can be conceptualised as progressing through two main developmental stages. The first includes the emergence and the assessment of a public need for a certain product or service production and/or delivery. The second (which is the main focus of the current research) involves the management of a PPP implementation which includes the construction and the service/product delivery.

The theoretical perspectives and development models of PPPs, however, do not map out the details of how partners interact in practice, and how effective they are in addressing and managing their differences in the critical phase of implementing a PPP project, which this study has addressed. Notably, PPP effectiveness, as a measurement framework, is important to the current study and has been used to evaluate the effectiveness of the management practices during the implementation phase of a PPP project lifecycle, as perceived by managers.

**PPP Effectiveness Measurement Framework**

The general meaning of effectiveness entails the ability of an organisation to achieve its goals. These goals are assumed to be stated in the vision and mission statements of the
organisation, and reflected in the way the organisation goes about doing its business to achieve those goals. However, finding an appropriate effectiveness measurement framework to be used in the current research to examine how effectively managed is the implementation phase of a PPP project, was difficult to achieve for several reasons. For example, it is possible for a PPP to have vague and multiple goals. Effectiveness as a concept, can also be conceptualised and customised to fit a particular organisational setting or context. For example, different people, inside and outside PPP entities, may adopt different approaches and standards in viewing the effectiveness of these entities in achieving their goals and objectives, and therefore, resulting in controversially different outcomes. Additionally, it can become more problematic when the concept of ‘effectiveness’ is dually or interchangeably used with the term ‘success’.

Nevertheless, given these difficulties, this study has found the perceptions of PPP managers in viewing the effectiveness of their management practices in managing their projects during the implementation phase, is the most appropriate measurement approach to employ for the current research. Wondolleck and Yaffee (2000), for example, have used this approach to investigate collaborative efforts in managing natural resources. Oliver (2004) and Mandell and Keast (2008) have also viewed this approach as an important measurement of effectiveness in evaluating the types of ‘networked’ organisational arrangements as is the case in PPPs. Further, it can be argued that PPP senior managers are considered to be the most knowledgeable persons in their fields, and therefore, are in a good position to give more accurate, focused and informative judgements about the progress that their projects have achieved as an outcome of their management practices.

Towards a Universal PPP Theory

Literature on PPP conceptual definitions and perspectives and on PPP effectiveness as a measurement framework that can be used to examine the management practices during the implementation phase of a PPP project lifecycle, reveals that PPPs are lacking a well-established theory or set of theories. It is argued that a universal PPP theory should be able to give very useful insights into the best type and approach to start a partnership

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2 Although success denotes a narrower meaning than effectiveness, the current study views it as an important indicator for effective performance. During the interviews, participants were asked to provide practical examples of management practices that they have experienced and proved successful as an evidence to support their claims. See section 2.1.5 for further discussion of this issue.
that ‘guarantees’ positive results or successful outcomes. As such, the current research has proposed a ‘generic’ partnership model that suggests conducting in-depth research to investigate each of the proposed PPP model components in different organisational settings in order to contribute to the development of what can be suggested as a universal PPP theory.

1.1.4 PPP Literature: An Overview

1.1.4.1 Previous research on managing PPPs

It is evident in the extant literature reviewed on PPPs that PPP arrangements face challenges and difficulties during their implementation (see for example, Noble & Jones, 2006; Weihe, 2008). Scholars in the field of PPPs have argued that most of these challenges by nature are managerial problems in the first instance. As such, a number of obstacles that particularly relate to the management aspects of the partnership contract have been identified by reviewing the literature on PPPs. Among these challenges are: poor level of partners’ engagement; lack of clarity on roles; poor performance management (Fox & Butler, 2004), and the absence of an authority figure or organisational hierarchical structure to govern the progress of a PPP (Jones & Noble, 2008). By way of example, the analysis of the implementation phase of the Sydney Cross City Tunnel (CCT) in Australia in 2006, revealed a dispute between partners for a long period of time around certain issues that were left unresolved such that later remedial actions were not possible (see also, Johnston & Gudergan, 2007; Siemiatycki, 2010). That is why Weihi (2008) argued that attention should be directed at managing the PPP process as it is an important aspect of a project lifecycle and that more empirical qualitative research is needed to map what goes on within the ‘black box’ of partners’ co-operation during the implementation stage of a PPP project. Other challenges that are related to the management aspect of a PPP during its implementation phase are institutional and situational differences that exist between partners, skill deficiency in managing PPPs and the lack of a well-established performance control system to oversee their effective management during implementation is also identified.

Many scholars in the field of PPPs have agreed on the existence of the institutional differences among partners involved in a PPP (Webb & Pulle, 2002). An example is the
dilemma of the ‘classical division’ between public and private sectors\(^3\) which has very substantial implication for PPPs in theory and practice (Klijn & Teisman, 2000). Further, prolonged conflicts and tensions could also arise during the implementation phase due to the interdependency and competing self-interests of the partners themselves (Siemiatycki, 2010; Klijn and Teisman 2000-2003). Klijn and Teisman’s research (2000, 2002, 2003) concluded that partners have little joint decision making and continuity in cooperation. These researchers have agreed that the main problem with partnerships was that the public sector is mainly based on authoritarian and hierarchical demand mechanisms (versus market mechanisms), with little room for flexibility that the management of PPP projects require, reducing the ability of the private partners to be fully and equally involved in the partnership. That is, because the public and the private sectors are two different ‘worlds’, governed by two different systems and established with different (mostly conflicting) rules, this can block interaction between the two different ‘networks’ (Klijn & Teisman, 2003). See also, Mann, Pier and Yasin (2007); Schaeffer and Loveridge (2002); Schmieg & Climko (1998); Tierney et al. (2010); and, Vining & Boardam (2008).

Skill deficiency in managing PPPs represents another significant challenge facing PPPs in the implementation phase. Managers involved in the partnership from both sides of the partnership are often lacking managerial and directing skills, experience and knowledge in managing such ‘hybrid’ organisations (Brown, O’Toole, & Brudney, 2004; Hartman, Hofman, & Stafford, 1999; Malmborg, 2003). A study in the UK in 2008 found that many public sector managers did not have the commercial expertise to oversee multimillion pound projects over a long period (Read, 2008). As such, Acar et. al. (2007), Bach & Whitehill (2008), Noble and Jones (2006) and Jones and Noble (2008) have noted that little empirical research has been done on what constitutes the basis for management expertise and competence, skills, experiences and the know-how needed to manage in a PPP’s unique environment.

\(^3\) In reference to the very different way each view and do things. Noble and Jones (2006) described the difference that can exist between partnering organisations that have different organisational settings, such as the case in the public and private sector organisations, as a ‘cultural distance’ which is explained by these researchers as a “deep and abiding cultural divide [that leads partners to] exhibit different values, concerns and accountabilities, pursue different objectives and place different aspects of risk and benefits” (p. 901).
Furthermore, the literature has shown that PPPs require a well-established performance control system to oversee effective management during implementation (Lister, 2000; Zafar Ullah et al., 2006) and to control performance quality standards (Grimsey & Lewis, 2004a). To do so, the entire procurement process should be geared toward the identification of the issues which are “perceived as potential problems in the future” (Irvin, 1993, p. 18). Also, performance parameters should be determined and agreed upon and reporting mechanisms should be established prior to program implementation (Schmieg & Climko, 1998).

1.1.4.2 Research on other related frameworks

Research in the field of managing PPPs does not offer conclusive, satisfactory and deep enough insights into the type and the nature of the interaction between partners during the implementation phase of a PPP development. Therefore, further research in this area was needed to explore the requirements for effective PPP management practices. Research on inter-organisational relationships (IORs) and on inter-organisational culture (IOC) were identified to be closely related to the research at hand. Only the research that was directly applied to PPPs was considered for the current research.

**Research on Inter-organisational Relationships (IORs)**

Research on inter-organisational relationships (IORs) revealed other challenges potentially facing PPPs in their implementation. Coordination and collaboration were identified as being important constructs in researching IORs (Klijn & Teisman, 2000; Klijn & Teisman, 2003; Malmborg, 2003; Teisman & Klijn, 2002). Green and Matthias (1997), cited in Zafar Ullah et al., (2006) argued that relationships between organisations form a continuum that starts with competition, progresses through cooperation to coordination and then on to collaboration and ending in control. Weihi (2008), however, found that the majority of PPPs resemble the exchange type of partnership, more than the collaborative type, as the former is based on distrust, distanced relationships and split purposes. Therefore, many PPP scholars called for the need for further research into this vital area as it can be described as a ‘black-boxed’ area (Weihe, 2008). Also, far greater understanding is needed about creating, implementing and maintaining effective intra- and inter-organisational relationships.
Managing PPP infrastructure projects in Jordan

(Bach & Whitehill, 2008; Fischbacher & Beaumont, 2003). More specifically, it becomes important to find answers to questions such as: How does interaction between partners take place in practice? What is the content and context of this interaction and nature of IORs between partners? How well managed are these IORs in a PPP setting?

Research on Inter-organisational Culture (IOC)

The impact of the organisational culture on management processes is widely recognised among scholars in this field of study. It has been argued that it is one of the very substantial determinants of the success or failure of a PPP (Coopers & Lybrand, 1996; cited in Twati, 2006). Similarity in culture of the public/private partners was among a number of factors contributing to their ability to meet their partnership challenges (Knickman & Stone, 2007).

As such, many scholars (e.g. Bach & Whitehill, 2008; Baumann, 2008; Huxham & Vangen, 2000; Jacobs, 1992; Johnston & Gudergan, 2007), agreed that different partnering organisations have different types of organisational cultures, and consequently, ‘cultural distances’ or gaps exist between them (Bach & Whitehill, 2008; Johnston & Gudergan, 2007; Malmborg, 2003; Noble & Jones, 2006). Examples of cultural differences between partners are the misunderstandings that can happen due to differences in language and the culture imbedded in it (Huxham & Vangen, 2000; Tierney, et al., 2010), the difference in the power that results in unequal relationships and culture clashes (Huxham & Vangen, 2000; Schaeffer & Loveridge, 2002; Schriener, 1991) and the differences in value systems that reflect adversely on joint-decision making and organisation (Jacobs, 1992; Klijn & Teisman, 2003).

Many PPP scholars have agreed that there is a need to research in-depth the degree of cultural compatibility or the integration that exists between partnering organisations and the type of culture that fits two or more organisations when partnering together. They called for further research into this vital area as it was rarely considered in the literature (i.e. Baumann, 2008; Chao, 2005; Lodorfos & Boateng, 2006; London, Rondinelli, & O'Neill, 2005; Rundall, 2000). In this regard, Bach and Whitehill (2008) particularly, raised a very important research question, namely, what could a successful plan of cultural integration in the assembly of a cross-sector joint venture look like? It is also
very important to explore the characteristics of the IOC that is pertinent when partners from different organisational cultures come to work together in multi-relational settings. To gain answers to the second question in particular, research on inter-organisational culture was needed to examine the cultural dimension of PPPs.

**Research on PPPs in Jordan: An overview**

PPPs were only recently introduced to Jordan. The first PPP project entered its implementation stage at the end of 2003. Institutionally, the legal and institutional frameworks had not existed before 2007, when the PPP policy was accomplished by the Executive Privatisation Commission (EPC), which was assigned the role of establishing the required legal and institutional frameworks for PPPs in Jordan. The Privatisation Law (number 25 of the year 2000), which provides the broader framework for privatisation transactions in the country, still provides the legal framework for PPPs in Jordan. As such, PPPs in Jordan are lacking practical experience and legal and institutional development.

Nevertheless, Jordan is described as one of the prolific users of PPPs in the MENA countries. Since the year 2000, the Government of Jordan (GoJ) announced more than 35 initiatives that use two or more PPP forms and arrangements with estimated overall spending averages around $US 750 million to $US 1.1 billion a year through to 2015 (El-Khatib, 2008). Strategically, PPPs in Jordan are considered a key component of the country’s economic development strategy (El-Khatib, 2008). Using the PPP *market maturity curve* mentioned by Siemiatycki (2010), Jordan’s experience in PPPs, as compared to its own economy, could be rated moderately high in activity and low in institutional and legal framework sophistication.

Although Jordan can be described as being active in using PPPs, no scholarly empirical research about PPPs in the country has been conducted. More specifically, not much is known about the management of Jordanian PPPs during their implementation in either theory or in practice.

In summary, the previous research and literature reviewed on PPPs internationally and specifically in Jordan, has revealed essential gaps in specific areas. These areas are: the requirements for effective management practices of a PPP in its implementation; a
detailed knowledge of managing problematic issues and the potential institutional differences between partnering organisations; the types of management expertise, skills, and competency needed to effectively manage PPPs; the controlling and monitoring mechanisms for ensuring the effective implementation of a PPP; and, a detailed knowledge about managing the implementation phase of the Jordanian PPP infrastructure projects. The literature reviewed in other fields that are closely related to PPPs has also revealed that not much is known about the nature of the interaction within the inter-organisational relationships (IORs) between partners in a PPP during its implementation phase. Furthermore, not much is known about the type of culture that integrates two or more organisations when partnering together (e.g. inter-organisational culture- IOC).

1.1.5 Research Problem and Questions

Literature reviewed on PPPs suggests that most of the PPP challenges emerge in the implementation phase of the project lifecycle and by their nature are managerial problems. As noted by many scholars in the field of PPPs, complexity in managing PPPs stems from several actors being involved, who might establish different rules, adopt different value systems, working rhythms and cultural characteristics, pursue different objectives, concerns, interests and exercise ‘partner disparity’ (see for example, Huxham & Vangen, 2000; Klijn & Teisman, 2003; Malmborg, 2003; Mann, Pier & Yasin, 2007). The details of these differences are important, because they foreshadow the reasons for conflict, which most likely can result in a deep and abiding organisational cultural divide, conflicts and restrictions or block the inter-organisational relations between partners. Also, these differences, can have profound reflections on the PPP management practices, the way problems are addressed, strategic decisions made and on how solutions are sought and, as a result, the overall effectiveness of PPPs. The assumption here is that the effectiveness in the implementation phase of a PPP can be achieved when issues of concern for both partners are effectively addressed and managed.

In Jordan, managing the implementation phase of PPPs remains largely under-explored. The majority of the few research attempts in this field are aimed at documenting, and occasionally, assessing certain aspects of a PPP project. This deficiency in PPP implementation management, in theory and practice, in Jordan and internationally,
represents a significant gap in the current PPP literature and presents a problem, because poorly managed PPPs are more likely to result in potential failure, particularly in developing countries like Jordan, where resources are scarce and PPP failure will substantially affect the whole developmental processes that these countries are undergoing. Therefore, the current research is significant in attempting to answer the following overarching research problem: How effectively managed is the implementation of PPP infrastructure projects in Jordan, as perceived by their managers?

To address this overarching research problem, the current research seeks to answer the following three main research questions:

RQ.1: How is the implementation phase of Jordanian Public Private Partnerships (PPPs) managed? (PPP management framework).

RQ.2: What is the environment in which inter-organisational relationships (IORs) in Jordanian PPPs are managed? (IORs framework).

RQ.3: What is the context in which inter-organisational culture (IOC) in Jordanian PPPs is managed? (IOC framework).

1.1.6 Overview of Research Methods

The theoretical framework of the research informed the choice for qualitative research, using in-depth interviews. Due to the limited literature on the subject matter, this research was designed to be an exploratory study. Its argument is guided, and informed, by the constructivist paradigm. The study is based on information collected from two PPP infrastructure project case studies in Jordan, namely, Queen Alia International Airport (QAIA) and Samra Waste Water Treatment Plant (SWWTP). The selection of the case studies was based on the theoretical sampling technique and other criteria such as access, availability, and convenience. In approaching the case studies, the strategy of sequential design (case studies follow one another) and prospective design (tracking changes forward over a certain period during the data collection and analysis) were employed. An open-ended, semi-structured interview technique was utilised. The interview questions were developed from the research questions, which were developed from the literature reviewed on PPPs and two other related fields (IORs and IOC).
ensure validity and relevance of the interview questions, convergent-type interviewing was utilised to refine the interview questions\textsuperscript{4}. Additionally, information was collected from media, news releases and websites to triangulate the interview data.

Managers from different partnering organisations in each PPP project, representing all senior level management employees\textsuperscript{5}, were targeted to participate in this study. Participation in the interviews was completely voluntary and participants were given an assurance of confidentiality. A total of 21 interviews were conducted in the two studies of the current research (10 and 11 interviews were conducted in Studies One and Two respectively). Interviews were conducted at the organisational workplace in Jordan during September 2009 and January 2010. The interviews were of an average of 62 minutes in duration. Interviews were tape-recorded and were sent back to the participants following transcription to ensure accuracy before being finalised.

The majority of the interviews were conducted in a mixed mode of Arabic and English. The rest were conducted either in Arabic or in English. Prior to data analysis, interview transcripts were translated from Arabic into English by the researcher and back-translated by a second accredited Arabic-English translator, to ensure the accuracy of the translated material. Content analysis was used to analyse the data collected and was undertaken with the aid of Leximancer software for data analysis and management purposes.

1.1.7 Delimitations of the Study

The current research addresses issues relating to the implementation phase of PPP infrastructure projects in the Jordanian context. First, it is directed towards those PPPs which have already been established (e.g. the stage when the PPP contract has been signed and the project construction process has commenced or when the construction process has been completed and the delivery of the service has started). Therefore, this research does not focus on the policy or politics of establishing and developing a PPP arrangement prior to the implementation phase. Such policy interaction and processes and the debate among policy makers and may be with other stakeholders is initiated in earlier stages of a PPP development. Hence, conceptual frameworks, such as ‘policy

\textsuperscript{4} A total of 14 respondents participated in this process.  
\textsuperscript{5} A total of 24 employees.
network theories’ and their ‘network management approaches and strategies’ adopted by ‘actors’ were deemed to have little relevance to the current research (See, Bueren, Klijn, & Koppenjan, 2003). Second, the research is delimited by the limited number of cases selected for the current research that was determined by the availability of PPP projects that have entered at least one of the two stages of the implementation phase. Third, although research in other fields (IORs and IOC) has been utilised to assist the current research in providing a more comprehensive and coherent view to understand the complexity of PPP as a phenomenon, and the details of the partnership process during its implementation, this study did not seek to utilise the full potential of other potentially related fields such as networks and governance models, and the research in these fields that has been applied and directly related to PPPs was particularly considered in the current research. Figure 1.2 provides a diagrammatic overview of the issues explained within the research, while highlighting the delimitations of the thesis.

Source: Developed for the current research

Figure 1.2: Theoretical scope and boundaries of the current research
1.2 THE STUDY CONTEXT: JORDAN

Jordan (The Hashemite Kingdom of Jordan) is located in western Asia in the heart of the Middle East. It is located to the east of the Jordan River, northwest of Saudi Arabia, south of Syria, southwest of Iraq and east of Israel and the Palestinian National Authority. Jordan has a land area of 89,342 sq km and is slightly bigger than the State of New South Wales (NSW) in Australia (see Appendix 1.1). Amman is the capital and largest city. Jordan has access to the Red Sea via a seaport city of Aqaba at the northern end of the Gulf of Aqaba. Petra is a complete ancient city carved in a mountain located in the southern part of Jordan. Jordan’s geographical significance results from its location in what most Christians, Jews and Muslims call the Holy Land. Jordan has a combination of a Mediterranean and arid desert climate, with Mediterranean prevailing in the North and West of the country, while the majority of the country is desert.

1.2.1 Jordan: Historical and Political Background

Historically, Jordan is part of a region that is rich in history and considered to be the cradle of civilisation. Over the centuries, it was occupied by many kingdoms including the Seleucids (in the 4th century BC), the Semitic Amorites (settled around the Jordan River in around 2000 BC), Assyrians, Babylonians, Greeks, Romans (in the mid 1st Century AD), Arab Muslims (in the 7th century), Christian Crusaders, Ottoman Turks (who gained control in 1516, in an increasingly anaemic form, until World War I) and finally was made part of the British mandate in 1920. This mandate was ceased in 1946, at which time the country gained its full independence, and the name was changed in 1949 to Jordan (as it was previously known as Transjordan, or Transjordania), reflecting its acquisition of the east bank land of the Jordan River. In 1946, after World War II, the Jordanian Parliament proclaimed King Abdullah I as the first ruler of the country. Abdullah I’s grandson, King Hussein, ruled nearly five decades, and brought peace and relative prosperity to the country. One major contribution was a peace treaty signed between Jordan and Israel in 1994. Since then, Jordan has remained at peace with all of its neighbours. King Hussein was succeeded by his son, King Abdullah II, and has ruled the country since 1999. He pledged to work toward a more open government and to ease restrictions on public expression. The Hashemite Royal Family is respectfully

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6 Petra was nominated in 2008 to be one of the new Seven Wonders of the World.
and reverently regarded by the majority of the Jordanian people for their moderate and temperate governance approach in ruling the country.

Politically, Jordan has a Constitutional Monarchy, with the King as its Head of State. The Executive branch is headed by a Prime Minister. The Cabinet is nominated by the Prime Minister and appointed by the King. The Legislative branch in Jordan is a Bicameral National Assembly which consists of the Senate (60 seats) and the House of Representatives (120 seats), elected by the populace for a four-year term. The Judicial branch in Jordan consists of the Court of Cassation (e.g. Abrogation) and the Supreme Court (court of final appeal). There are 12 political parties in Jordan.

1.2.2 Jordan: Social and Cultural Background

Demographically, the population of Jordan, was estimated in 2007 as 5.7 million; with 37.3% of the total population being less than 15 years of age. Arabic is the official language in Jordan, although English is also widely spoken among the higher socio-economic groups and in commerce and government. English is taught in all public and private schools. About 93% of Jordan’s population are either from Bedouin origins or Palestinians who fled their country as a result of wars. The remaining 7% come from different ethnic minorities such as Circassians, Chechens, Armenians and Kurds. About 85% of the people are Sunni Muslims. The rest are Christians. Appendix 1.2 provides more details on the geographic and demographic characteristics of Jordan.

The culture of Jordan follows Arab traditions, which are strongly influenced by a tribal culture reflecting the collective nature of social relations that is associated with values and norms such as solidarity and mutual responsibility (Hutchings & Weir, 2006; Loewe, Blume, & Speer, 2008). The family in Jordan is of central importance, which is strongly connected to the wider community and other extended social networks. Holt’s (2005) description of the tribal ‘creature’ in the Middle East can be applicable to a great deal to the majority of Jordanian society. In describing the tribal ‘creature’, he commented that it is “a place where the daily rhythms of life reinforce group commitments [and] that everybody belongs to somebody […] Politics remains

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7 One of the social and organisational challenges facing Jordan’s development results from negative aspects of strong social connections of using Wasta (i.e. favouritism; the use of personal connections to receive preferential treatment). For this, see also, Hutchings and Weir (2006) and Loewe, Blume, & Speer (2008).
fundamentally communal...[and] religion is a matter of birth rather than choice” (Holt, 2005, p. 520). Particularly, Jordanians view their country as being located in the heart of the Middle East with a unique culture based on a peaceful mindset and a secured retreat for the ‘disadvantaged’ from the surrounding countries (i.e. Palestine and Iraq). It blends deep heritage and modernisation. In addition, Jordanians perceive themselves as people with obligation, tolerance, dignity, nobility, decency, generosity and hospitable manners. They regard such values as important and closely associated with their way of living. Jordan, however, has been adversely affected by the unfortunate stereotypes that were fed by a series of Middle East conflicts in Palestine, Iran, Libya and Iraq (Lorraine, 2001).

1.2.3 Jordan’s Economy

Jordan’s economy has traditionally been based on agriculture, although less than 5% of the land is arable. Phosphates and Potash\(^8\) are the primary natural resources produced in great quantity. Oil refining, chemical manufacturing and the production of metals and minerals also contribute to economy. The service sector accounts for around two-thirds of the total output and covers wholesale and retail trading, education, health, finance, transport and tourism. Jordan’s health service is known to be the best in the region. Jordan’s economy is also highly dependent on tourism as it is considered as an important sector because of Jordan’s geographical location and political stability. The total number of arrivals to Jordan in 2009 exceeded 7 million visitors and tourists. The tourism receipts was estimated to be US$ 2.7 billion for the same year (Jordan Ministry of Tourism and Antiquities, 2009).

Jordan’s currency is the Jordanian Dinar, or JD\(^9\). At the end of 2008, the Gross Domestic Product (GDP) growth rate in Jordan was estimated (in constant prices) at 12.3%. The per capita income was JD 1961.4 (about US$ 2746). The unemployment and the inflation rates registered in the same year (end of 2008) were 13.1% and 5.4% respectively (see Appendix 1.3).

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\(^8\) Derived from the Dutch word *potasch*, and originally referred to wood ash. Potash refers to potassium compounds and potassium-bearing materials (Searls, 2010).

\(^9\) Currently (January 2011), a Jordanian Dinar (JD) is worth US$1.4.
Jordan is rapidly developing in some fields such as education, information technology and e-government. However, Jordan’s major economic and environmental challenges include: a high external debt, unemployment, reducing dependence on foreign grants, deforestation, desertification, and limited natural fresh water resources (see also Al-Jaghoub & Westrup, 2003; Loewe, Blume, & Speer, 2008).

According to the *Growth Competitiveness Index* of the World Economic Forum (WEF), in 2005, Jordan ranked 45th out of 117 countries (Loewe, Blume, & Speer, 2008, p. 263). In the World Bank report on *Doing Business*10 in 2009, Jordan ranked 26th among 183 countries worldwide and the 7th among MENA countries with regard to its tax system. In ease of doing business, protecting investors, trading across borders and enforcing contracts, Jordan has ranked 100th, 119th, 71st, and 124th worldwide respectively. In relation to MENA countries, Jordan occupied an average ranking in all areas (see Appendix 1.4). Jordan’s direct non-oil economic competitors in the region are Lebanon and Egypt. Dubai, Bahrain, Saudi Arabia and Qatar are also economic competitors of Jordan (see also Loewe, Blume, & Speer, 2008).

Finally, Jordan is a member of the Council of Arab Economic Cooperation (CAEC) and the Arab Monetary Fund (AMF). It also belongs to the World Trade Organisation (WTO) and has a free trade accord with the USA and an association agreement with the European Union (EU).

1.2.4 The Importance of Studying Jordan

Broadly speaking, MENA countries, including Jordan, share similar social and cultural values and managerial and social development objectives and challenges, although there are still considerable cultural and economic differences among them. They strive to create modern infrastructure to support development and compete in global markets. The infrastructure needs in the MENA region are also large. MENA economies, and particularly non-oil countries, are unlikely to be able to finance their infrastructure

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10This rating provides measures of business regulations and their enforcement across 183 economies. Economies are ranked on their ease of doing business, from 1 – 183, with first place being the best. A high-ranking index means the regulatory environment is conducive to the operation of business. This index averages the country’s percentile rankings on 10 areas made up of a variety of indicators, giving equal weight to each area (IFC, 2010).
needs out of their budgets into the future. In effect, they are increasingly turning to the private sector to build, maintain and operate a wide variety of facilities under long-term PPP contracts. As such, PPPs in MENA have the advantage of being the least publicly-resisted option of public service delivery, compared to the other alternatives like privatisation, for example, in which permanent transfer of asset ownership from the public to the private sector is seen as loss of ownership and control over national assets (Al-Nasa’a, 2007). However, PPPs in MENA countries, as well as Jordan specifically, need a well-established institutional and legal framework.

Comparatively, Jordan is a developing, middle-income country, which has scarce natural resources. It is argued that, since its independence in 1946, Jordan has been transformed from being a rural, poor country to an urban country with a highly educated population, with literacy rates of 89.2% and 99.4% for adult and youth respectively (Department of Statistics- DOS, 2007) and illiteracy rates lower than in the rest of the Arab world (Al-Jaghoub & Westrup, 2003). The country has a human development rank that is higher than its GDP rank (UNDP, 2001; cited in Al-Jaghoub & Westrup, 2003). As such, PPPs in Jordan are considered as a key component of the country’s economic development strategy (El-Khatib, 2008). Al-Jaghoub and Westrup (2003) argued that “Jordan exhibits many of the characteristics of a ‘competition state’ in terms of the promotion of mixtures of public and private partnerships” (p. 93). Also, EPC (2010) anticipated that the future is ‘promising’ for PPP projects to enhance viable private investments. This is evident from the overall expected infrastructure spending averages in the country to be around $US 750 million to $US 1.1 billion a year through to 2015 (El-Khatib, 2008). The GoJ is increasingly using PPP arrangements and initiatives in both infrastructure and services sectors. Using the PPP market maturity curve (see Figure 2.19), Jordan’s experience in PPPs can be rated moderately high in activity and low in institutional and legal framework sophistication.

Although the GoJ is moving rapidly in employing PPPs in the Jordanian market, much is still needed for PPPs in terms of the institutional framework, including policy and legal frameworks. Additionally, there is a need for well-prepared and institutionalised project implementation as little action has been initiated in this regard (Al-Nasa’a, 2007). Yet, not much is known about the management of the implementation phase of Jordanian PPPs in either theory or practice, as research in this vital area has not existed.
As such, there is a critical need to review this newly introduced PPP experience in Jordan and conduct field research that is specifically directed towards exploring and examining the challenges facing the management of PPPs during their implementation. In doing so, this study has the potential to help improve Jordanian practitioners’ understanding and enhance their skills and knowledge of how well partnerships are (and could be) managed in a way that reflects effective performance and enhances potential success. Also, this study has the potential to help inform Jordanian policy makers on the challenges that PPPs could face during implementation and to improve their knowledge in making more rational policies and decisions relating to the establishment and management of current and future PPPs. Besides, researching PPPs in Jordan is anticipated to yield substantial theoretical implications for Jordan and internationally. It will contribute to the development of management theory in this under-researched field and will provide researchers and practitioners alike with a more detailed picture of the partnership phenomenon in its implementation phase. It will also contribute to other research efforts towards potentially more replicable PPP management models and practices.

Finally, because the researcher is a Jordanian national and has a sound knowledge of the Jordanian economic, social and cultural background, this research was purposefully planned to be conducted in Jordan. This knowledge is important in dealing with the complex and sensitive research, which has substantial social and cultural implications embedded in it. More specifically, to capture such research issues, as inter-organisational relationships and inter-organisational culture, acquiring an ‘insider status’ can be of great importance. Acquiring such research status, as argued by Hutchings and Weir (2006), has the advantage of “gaining access to organisations as well as soliciting information from interviewees” (p. 274). At the same time, the researcher adopted an ‘outsider view’, which gives academic distance to the issues researched by not being employed in any of the organisations or projects researched and being based overseas while the research was conducted. Undertaking this research in Jordan also has the advantage, relative to other countries in the region, of political and social openness where research permits are required and are difficult to obtain (Loewe, Blume, & Speer, 2008). Additionally, this research was conducted in Jordan because the
two selected PPP projects meet the objectives of the current research in targeting the two stages of the PPP implementation phase: construction and delivery.\footnote{During the period of data collection, one of the projects had just entered the construction stage and the second had completed construction and entered the delivery stage (see Figure 3.2).}

**CHAPTER 1 SUMMARY AND THESIS OVERVIEW**

**Chapter 1** has set the foundation and the directions for the current research. An overview of the study’s research purpose and contribution, conceptual definitions, PPP literature, research problem and questions, methods, and delimitations were provided in the first section of this chapter. In the second section of this chapter, an overview of the study context, including the historical, social, cultural, and economical background of Jordan was presented.

**Chapter 2** provides the theoretical framework and the literature review for the current research, which consists of four main sections. The first section explores the theoretical perspectives of PPPs, including PPP definition, focus, rationale and other theoretical considerations. The second and the third sections provide a review of previous research on managing PPPs, as well as on other co-existing and related frameworks, namely inter-organisation relationships (IORs), inter-organisational culture (IOC) and PPPs in Jordan. In the fourth section, research problem and questions are provided.

In **chapter 3**, the study design and methodology are explained. The methodological context of the research including orientation, approach, domain and case study organisations is provided in the first section of the chapter. In the second section, research design that includes a discussion of case study selection, access and instrument used for data collection is provided. The third section explains the procedures for data collection and analysis followed in this research. The fourth section addresses issues of validity, reliability and methodological limitations.

**Chapter 4** presents the study findings from two infrastructure projects in Jordan used as case studies. This chapter provides answers to the research problem and questions in three sections. Findings related to the PPP management framework are presented in the first section. Findings related to the inter-organisational relationship (IORs) are
presented in the second section. Findings related to the inter-organisational culture (IOC) are presented in the third section.

**Chapter 5** presents a discussion of the study findings from the two main cases used in this research and integrate the findings to the literature. This chapter consists of three main sections. The first section provides a discussion of key findings for the PPP management framework. The second section provides a discussion of key findings for the IORs framework. The third section provides a discussion of key findings for the IOC framework.

Finally, conclusions drawn from the current research are included in **Chapter 6** in this thesis. The chapter presents an overview of the study in the first section. It also provides a discussion of the research implications and limitations in the second section. It concludes with a discussion of the study limitations and future research in the third section.

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**Figure 1.3: Overview of chapters**
The following chapter (Chapter 2) presents PPP conceptual perspectives. A review of the literature on PPPs as well as other related literature on inter-organisational relationships (IORs), inter-organisational culture (IOC), internationally, and specifically in the Jordanian context, are also presented. Chapter 2 concludes by presenting the research problem and questions.
CHAPTER 2: CONCEPTUAL PERSPECTIVES AND LITERATURE REVIEW

INTRODUCTION

Public Private Partnership (PPP) can be broadly defined as a partnering process between two or more public and private sector organisations, (and may be any other non-profit community organisation) to produce and/or deliver a public good or service that may not have been possible without this partnership arrangement. Different PPP modalities have been developed to meet the requirements and the purposes of different partners involved, as well as other situational conditions that justify the rationale to establish each PPP initiative. PPP as a phenomenon however, is described as complicated and problematic. To provide a deeper understanding of this phenomenon, researchers in the field of PPPs offered their perspectives of the nature of PPPs. The theory of cooperation, enforced cooperation, game theory and partnership synergy view are examples.

The managerial aspect of a PPP, and particularly during the implementation phase of development, is the most problematic type of management, due to the complicated and uncertain organisational settings that PPPs operate within (Bovaird, 2004; Vining & Boardam, 2008). The institutional and organisational differences among partners involved in a PPP arrangement, and the sophisticated management competency and expertise required to manage this type of networked, multi-relational and hybridised organisation, add more challenges to the management and application of PPPs. Therefore, to provide deeper insights and understanding of the micro-level of management aspects of a PPP, previous research on PPPs (however limited), as well as on other coexisting and related frameworks, namely inter-organisational relationships (IORs) and inter-organisational culture (IOC) are provided as a background for the current research.

The conceptual perspectives and literature reviewed for the current research are discussed in this chapter (see Figure 2.1). The chapter consists of four main sections. The first section presents PPP conceptual definitions and perspectives. The second section provides a review of previous research on managing PPPs. The third section provides a review of other co-existing and related theoretical frameworks. The fourth
section presents the research problem and questions, which are provided in summary at the end of the chapter.

Figure 2.1: Chapter 2 structure

2.1 PPP CONCEPTUAL DEFINITIONS AND PERSPECTIVES

The concept of Public Private Partnership (PPP) is not new (see, deBettingnies & Ross, 2004). What is new is the rate at which PPP projects have gained favour with governments throughout the world over the last decade (Noble & Jones, 2006). A PPP project involves partnering between the public and the private sectors to deliver a service or a product to the public, which would be regarded traditionally as falling within the scope of public sector responsibilities. As such, different PPP schemes, models and arrangements have been developed to satisfy the different needs and objectives of the partners involved. This part of the chapter provides the conceptual background for the current research. It starts with defining PPPs and explaining their
rationale. Then, different PPP forms and modalities are discussed. It also includes a discussion of PPP conceptual perspectives as viewed by a number of PPP scholars.

2.1.1 PPP History and Definition

**PPP History**

It may not be possible to trace the historical origins of ‘modern’ PPPs as an alternative used by governments to respond to the increased public demands for improved quality and quantity of goods and services. In infrastructure development particularly, PPP is not a totally new, so revolutionary concept, mainly because the private sector had been involved in the construction and/or delivery of public goods and services that started by contracting out initiatives long time ago. Some scholars even suggested that contracting out is the foundation of PPPs (deBettingnies & Ross, 2004). Vining and Boardam (2008) argued that “projects with partnership characteristics began to emerge in the 1980s [and] was not until the mid-1990s that P3s really began to take hold” (p. 200). However, the first PPP in modern history occurred in 1854 and was used to construct and operate the Suez Canal (Levy, 1996). Savitch (1998; cited in Schaeffer & Loveridge, 2002) argued that “there is a long tradition of public-private cooperation (PPC), particularly in education and health care” (p. 169). Researchers have dated such cooperative efforts in Europe back as far as the 16th century. In the UK, for example, public finance initiative (PFI) projects started the early 1990s (Weihe, 2008). In the United States, Beauregard (1998; cited in Schaeffer & Loveridge, 2002), saw public private cooperation (PPC) emerge in the middle to late 1880s. In the United States, Neal (2010) found that cooperation between the public and private sectors was a common practice during the colonial era, 200 years ago, to provide the poor or indigent with a private home at public expense.

All the same, early reports of the PPP concept, appeared in the United States thirty years ago in an article titled ‘Public-private partnerships to stave off disaster’ (Rohatyn & Blodgett, 1979). The concept was offered as a practical solution to the government’s financial problems with the aim of carrying out ‘too large or too risky’ projects. The researchers mentioned that “new structures came into being- structures that represented the joining of government and the private sector (p. 6) .. [and the solution] can come about only in cooperation [between both sectors] and in a structure that combines the
best of both” (p. 7). According to Rohatyn and Blodgett (1979), the concept was developed by a group of public and private sectors representatives over a period of several months working together on the Energy Corporation of the Northeast (ENCONO) project. The idea was to run this corporation like a private business but still be publicly accountable.

In Victoria (Australia), for example, PPPs have evolved throughout three distinct historical periods: (1) the era of off-balance sheet financing (from the late 1980s to 1992) which was characterised by an overriding concern as to the key reason behind the use of PPPs; (2) the belief in competition and efficiency of the private sector (from 1993 to 1999) on the premise that increased private sector involvement could drive growth and efficiency; and (3) the value for money in the public interest and optimal risk transfer (from 2000 to present) and characterised by a clear objective to achieve value for money and optimal (opposed to maximum) risk transfer to the private sector (Maguire & Malinovitch, 2004). Quiggin (1997), however, traced the involvement of the Australian private sector back to the provision of public goods and services, especially in the transport sector, at the time of early colonisation (early 1800s).

To date, PPP is part of the privatisation scheme in Jordan. Prior to mid 1990s, the concept had not been established, neither in research nor in the practical application. In research, very little has been done to explore the management aspects of the Jordanian PPPs and to investigate the effective practices in managing these projects. In the practical side, the earliest preliminary feasibility studies to some of the proposed infrastructure pilot projects (e.g. Samra Waste Water Treatment Plant- SWWTP) had started in 1995. Only in mid 2003, the first Jordanian PPP project (e.g. the Jordan Education Initiative- JEI) had entered its implementation phase.

**PPP Definition**

A PPP has been described as lacking definitional clarity (Crawford, 2003; Hodge, 2004; Hodge & Greve, 2007; Neal, 2010; Teicher, et al., 2006; Vining & Boardam, 2008) and considerable variations have existed amongst the many definitions of what constitutes a PPP (Neal, 2010). Neal (2010), for example, contended that the widespread use of the term public private collaborations hides important differences between these forms of
‘collaboration’ efforts. The difficulty in defining PPPs is mainly because different partners often conceptualise the term ‘partnership’ in contrasting ways (Unwin, 2005). It is also true that, PPPs usually involve different models and forms that sometimes one form merges into the other in practice (Vining & Boardam, 2008), and a definition of one form might not resemble the other PPP forms. This also can be explained as the term has been addressed by scholars from multidisciplinary backgrounds such as “public administration, political science, engineering, finance, business and project management, as well as reflected in government and industry reports and media stories” (Siemiatycki, 2010, p. 43), resulting in the same PPP phenomenon being framed in different ways. Also, the international connotation of the term has sometimes been interchangeably used with privatisation and sometimes with other forms of public service delivery modes such as contracting out\(^\text{12}\). The lack of an agreed-upon vocabulary for describing different cooperative efforts such as alliance, coalition and association has also participated in the difficulty to define what exactly PPP is about (Schaeffer & Loveridge, 2002). Yet, other scholars have viewed PPP arrangements as being different from networked, hybridised and inter-organisational relationship (IOR) arrangements (Keast, 2010).

The difficulty in defining PPP could also be because the precise boundaries of the PPP field are still emerging (see also, Hodge & Greve, 2007). However, the general term of ‘partnership’ has mainly meant cooperation and commitment between public and private actors in which they develop mutual products and/or services and in which risks, costs and benefits are shared (Klijn & Teisman, 2000; 2003; Vining & Boardam, 2008). It is an arrangement in which partially or traditionally public activities are performed by the private sector (Savas, 2000).

In their attempts to reach consensus about the nature of PPPs, and to provide a better understanding of the concept, some scholars elaborated on the key elements and assumptions underlying the definition of partnerships. For example, Bult-Spiering (2003), offered a working definition of PPP to include eight key elements (see Figure 2.2): one or more public actors; one or more private actors; co-operate; to realise a

\(^{12}\) Differences in the terminology used to describe PPPs around the world is referred to by Hodge and Greve (2007) as the ‘language game’ where, in Victoria (Australia) for example, PPPs are completely separated from privatisation, whereas in the UK, PPPs are equivalent to privatisation. In Jordan, however, PPPs institutionally fall within the Executive Privatisation Commission (EPC) framework, and at the same time, are addressed separately on occasional cases within the same framework.
mutually agreed upon goal; in an organisational structure; that provides the means; accepts the risks; and, shares revenues.

McQuaid (2000) also stated that there are a number of assumptions underlying a definition of a PPP. First, the potential for synergy of some form, so ‘the sum is greater than the parts’ (see also, Klijn & Teisman, 2003). Second, the partnership involves both development and delivery of a strategy or a set of projects or operations, although each ‘actor’ may not be equally involved in all stages. Third, in PPPs, the public sector is not pursuing purely commercial goals. For McQuaid, partnership involves cooperation; to work or act together.

Other scholars viewed PPP from the perspective of the purpose and the functions that a partnership arrangement is intended to serve. Webb and Pulle (2002), for example, saw PPPs as a partnering process between the public and the private sectors “for the purposes of designing, planning, financing, constructing and/or operating projects which would be regarded traditionally as falling within the remit of the public sector” (p. 2). This stressed the importance of the collaborative aspect of the partnership with the aim of achieving mutual interests for partners. Similarly, Pessoa (2008) defined PPP as “a sustained collaborative effort between the public sector and the private sector to achieve a common objective while both players pursue their own individual interests” (p. 313). He argued that this definition implies that each partner shares the resources.
needed (financial, managerial and technical) and shares the design, execution and/or operation of the project in accordance with each partner’s comparative advantage. Partners also partially share the risks associated with the PPP project and obtain the benefits which the project creates (Pessoa, 2008). As such, PPP is generally used to mean working arrangements between a public sector organisation and any other organisation outside the public sector (Bovaird, 2004).

In the effort to reach a more meticulous PPP definition, some PPP scholars attempted to distinguish between different types of partnership relations according to the situations that bring partners to work together as well as the nature and the level of the relationship itself that bind partners together (as discussed later in this chapter). Pace et. al. (2000) for example, differentiated between cooperative and non-cooperative relationships. In cooperative relationships, the researchers distinguished between the team partnership, where the public sector enters into an exclusive agreement with any type of organisation (e.g. be it a for-profit firm, a nonprofit organisation or another government agency) and collaboration. In the case of team partnership, “team members work closely together and share risks, rewards, costs and trust though not always equally” (p. 66). Collaboration, on the other hand, is a cooperative arrangement that involves more complicated interactions between partners (usually from multiple organisations of different types). The researcher has also used the analogy of ‘markets’ to describe the non-cooperative type of relationships between actors. Pace et al., (2000) described this type of relationship as follows:

“[In market interactions], buyers and sellers meet but they do not share. They do not need to have a history of independence to work together. In the case of PPPs, a market-type partnership is one in which the government buyer elects to acquire something from the private seller [...] The association between the public and private sectors is short-term and defined, similar to the buyer-seller relationship” (p. 69).

In later research, Schaeffer and Loveridge (2002), have also distinguished relationships between partners as ranging from informal efforts of cooperation to a more formal partnership relations, which is well-stipulated and defined in a formalised agreement or contract. Also, the researchers differentiated between the ‘leader-follower’ type of relationships and the ‘exchange, buyer-seller’ ones, where the former is most likely to occur in situations where one participant has significantly more resources or power than
the other, while the latter entails relationship voluntary exchanges in which both the ‘buyers’ and ‘sellers’ are better off afterwards. The researchers also distinguished between a limited partnership (which occurs when risks and rewards are not shared equally, and one partner, for example, agrees only to a certain amount of liability to the partnership) and full partnership (when the risks and rewards are shared and organisational decisions are mutually made by the partners).

In refining the partnership concept, Brinkerhoff (2002), developed and combined two salient partnership dimensions to suggest an ‘ideal type’ definition of the partnership concept. These dimensions were: mutuality (which represents the spirit of partnership principles); and, organisation identity (which encompasses rationality in selection of partners). The result of the combination of these two dimensions, the researcher suggested that partnership can be defined as: “a dynamic relationship among diverse actors, based on mutually agreed objectives, pursued through a shared understanding of the most rational division of labour based on the respective comparative advantages of each partner .. partnership [also] encompasses mutual influence, with a careful balance between synergy and respective autonomy, which incorporates mutual respect, equal participation in decision making, mutual accountability and transparency” (p. 21). For Brinkerhoff (2002), partnership is defined on a relative scale and is distinguished from relationship types such as contracting, extension, co-optation and gradual absorption. What is notable in Brinkerhoff’s definition is that it is supported by many examples from partnership practices as shown in both partnership literature and practical experience. Further, it extended other definitions by adding other important attributes to the partnership definition such as mutual respect, equal participation and comparative advantages of each partner (e.g. the synergistic, value added advantage), that were not mentioned in many other PPP definitions.

Nevertheless, many scholars in the field of PPP agreed that partnership involves some form of coordination, collaboration and synergy between partners in the partnership process. Monsma (2004), for example, defined PPP as a collaborative arrangement between one or more governmental agencies and one or more nongovernmental entities, be they for-profit or nonprofit community organisations. These organisations collaborate to provide a good or service that has been deemed as being in the public interest. Also, Chang et al. (1999) stated that a PPP is “a collaborative arrangement
between government and one or more private parties. PPPs specify joint rights and responsibilities, which implies some sharing of risks, costs, or assets. In a PPP there is a mutual leveraging of each partner’s strengths.” (p. 2). Neal (2010) also gave a similar definition to a PPP, stressing the inequality of sharing risks and rewards among partners. He defined a PPP as “long-term collaborative organisations composed of at least one public partner and one private partner. The risks and rewards of collaboration are shared, though not always equally” (p. 75). Yet, Lasker, Weiss and Miller (2001) emphasised the synergistic aspect as the proximal outcome of collaboration that gives partnership its unique advantage. Synergy, for the researchers, entails “the power to combine the perspectives, resources, and skills of a group of people and organisations” (Lasker, Weiss & Miller, p. 183). For Kaul and Conceica (2006), however, partnering entails “some joint decision making and sharing of responsibilities, opportunities, and risks” (p. 219). According to the researchers, PPPs “go beyond mere contracting across actor lines. They are, as the name suggests, about partnering” (p. 219).

In the application side, the operational definition of PPP in Australia, for example, is that the government has a long-term business relationship with risks and returns being shared with the private sector, which becomes involved in financing, designing, constructing, owning or operating public facilities or services (Hodge, 2004). However, the specified nature of each partnership will be defined through a contractual agreement (Queensland Government, 2008). In Jordan, the EPC has defined PPP as an “a relatively long-term written agreement between the public and the private sectors for the purpose of providing a service of a general nature or implementing a project or performing a certain task whereby project financing and allocation of risks arising therefrom [are] pursuant to the contractor” (Executive Privatisation Commission of Jordan, 2008). EPC saw PPPs as an opportunity to build up “the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards” (Executive Privatisation Commission of Jordan, 2010).

Table 2.1 shows a summary of PPP definition components given by a number of scholars in the field. As the table shows, it can be concluded that there is an agreement among many scholars about certain components of a PPP definition (highlighted in yellow).
Table 2.1: Attributes of PPP definition

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</thead>
<tbody>
<tr>
<td>1. Involvement of one or more public actor; one or more private actor</td>
<td>√</td>
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<tr>
<td>2. Partnering with any other organisation (be for-profit or nonprofit, nongovernmental)</td>
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<td>4. Exerting cooperation, synergy and/or collaboration</td>
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<td>5. Sharing resources, opportunities and rewards, revenues, benefits, assets and joint rights and decision making</td>
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<tr>
<td>6. Sharing risks (fully, partially), responsibilities and costs</td>
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<tr>
<td>7. Financing of project and allocation of risks are pursuant to the contractor</td>
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<td>8. Agreeing on goals and sharing common objectives and interests</td>
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<tr>
<td>9. Working through an organisational structure to achieve goals</td>
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<tr>
<td>10. Developing and delivering a strategy, service, project</td>
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<tr>
<td>11. Pursuing own interests, inequality of involvement, and leveraging of each strengths and comparative advantage</td>
<td>√</td>
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<td></td>
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<tr>
<td>12. Planning, financing, designing, constructing, operating and/or owning projects</td>
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<tr>
<td>13. Entering long-term business relationship through defined contract and agreement</td>
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<td>14. Careful balance between synergy and autonomy</td>
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<td>15. Mutual respect and equality</td>
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</tbody>
</table>

Source: Synthesised by the researcher from Bovaird (2004); Bult-Spieering (2003); Chang et al. (1999); EPC, Jordan (2010); Kaul and Conceicao (2006); Klijn and Teisman (2003); McQuaid (2000); Monsma (2004); Neal (2010); Pessoa (2008); Queensland Government (2008); Savas (2000); Webb and Pulle (2002); and, Brinkerhoff (2002).

As such, a PPP should involve some sort of cooperation effort, synergy and collaboration; between one or more public actors; and, one or more private actors. These actors agree to share resources, opportunities, rewards, revenues, benefits, joint rights and decision making; share risks (fully or partially), responsibilities and costs; and, making use of each strengths and comparative advantage. Exceptions to this consensus are shown in Table 2.1. It also can be noted that the defining qualities shown

---

13 Considerable differences exist between terms such as: coordination, cooperation, synergy and collaboration (see section 2.3.1.1 for further clarification).
Managing PPP infrastructure projects in Jordan

by Bult-Spiering (2003), Pessoa (2008), Neal (2010) and EPC, Jordan (2008) were the most supported in other definitions.

As noted from the above discussion, PPPs defining still lacks agreement amongst scholars in the field about the nature of partnership relations that bind/glue partners together. These relationships have been described by a number of PPP researchers as a ‘cooperative effort’ (i.e. Bult-Spiering, 2003; Hodge & Greve, 2007; Klijn & Teisman, 2000; Klijn & Teisman, 2003; McQuaid, 2000; Monsma, 2004), as a ‘collaborative arrangement’ (i.e. Chang, et al., 1999; Neal, 2010; Pessoa, 2008; Tierney, et al., 2010; Webb & Pulle, 2002); or as a ‘partnering business relationship and/or barely ‘working arrangement’ by others (i.e. Hodge, 2004; Kaul & Conceicao, 2006; Pessoa, 2008; Webb & Pulle, 2002). The lack of agreement on the nature of partners’ relations can become more complicated when these relations are further classified by many PPP scholars into various forms and types (i.e. cooperative/non-cooperative, full/limited, informal/formal, team/collaborative). More importantly, it has also been noted that this lack of agreement entails more than a matter of a ‘language game’ as described by Hodge and Greve (2007). For example, considerable differences exist between ‘cooperative’ and ‘collaborative’ partnership arrangements, especially in terms of the level and nature of partners’ relations that each resembles. It is most likely that these differences have resulted from the fact that PPP has been addressed and studied in different conceptual frameworks such as privatisation and contracting out schemes, governance and networking theories and models, IORs, stakeholders’ theory and involvement, alliances and joint ventures. Each of these arrangements entails a different form and level of actors’ involvement and participation, and therefore, results in shaping the nature of relations between them differently.

As previously noted, a more coherent PPP definition is difficult to achieve until a more conclusive PPP theory is established. However, the current research has integrated and synthesised many PPP definitions given by a number of PPP scholars into a more comprehensive definition (see Table 2.1). This study defines public private partnership (PPP) as: “a long-term, dynamic, well-defined and established relationship between one or more public, private and any other organisation14, based on mutual objectives, shared understanding and respect, where resources are comparatively injected into the

---

14 For the purposes of the current study, PPP has mainly been used to mean partnerships between public and private sectors, unless otherwise specified.
partnership, benefits, opportunities and rewards are satisfactorily allocated and risks, responsibilities and decision-making are relatively shared among partners to achieve their mutually agreed upon goals” (Bovaird, 2004; Brinkerhoff, 2002; Bult-Spiering, 2003; Chang, et al., 1999; Jordan Executive Privatisation Commission-EPC, 2010; Kaul & Conceicao, 2006; Klijn & Teisman, 2003; McQuaid, 2000; Monsma, 2004; Neal, 2010; Pessoa, 2008; Queensland Government, 2008; Savas, 2000; Webb & Pulle, 2002).

2.1.2 PPP Forms and Modalities

It can be argued that different PPP forms and models were originally developed as a result of the needs of both public and private sector organisations. To some extent, PPPs can be seen as an extension of the contractual service delivery models premised in Osborne and Gaebler’s (1992) thesis of separating the purchaser and provider roles of government (Teisman & Klijn, 2002). In fact, Teicher et al., (2006) suggested that corporatisation and privatisation allowed the private sector to become an important partner in public service delivery systems. Governments, on the other hand, have found PPPs to be new venues for the production and delivery of public goods and services. As such, it has been recognised that the ‘one size fits all’ approach does not work. For example, whereas BOOT schemes (Build, Own, Operate, Transfer) have been the preferred form of PPP for urban roads, the design, construction and maintenance arrangements might be better suited to rural roads (Pessoa, 2008). Consequently, varying PPP forms and modalities have been created to satisfy different government needs and policy objectives.

PPP models range from an arrangement where demand is controlled by government and the costs of service delivery are substantially or fully funded by government, to the arrangement where government has little (or even no) control over demand and shares the costs of services with users. In the latter case, the government’s role is limited to setting some performance requirements, providing some infrastructure (people, land, etc) and project facilitation in areas such as planning (Klijn & Teisman, 2000). In fact, the choice of a particular PPP form depends upon factors such as the government’s objectives, the availability of finance, the project’s nature, scope, risks and the
experience that the private sector can bring to the partnership (Pace, et al., 2000; Schaeffer & Loveridge, 2002; Webb & Pulle, 2002).

McQuaid (2000) elaborated on the emergence of different PPP models and argued that any individual partnership is a combination of five different dimensions, and that there can be large differences between and within partnerships over time. These dimensions include: (a) what the partnership is seeking to do (i.e. the purpose and whether it is strategic or project driven); (b) who is involved (i.e. the key actors and the structure of their relationships in the partnership); (c) when (i.e. the timing or stages of development of the partnership process and changing relationships and activities over time); and (d) where (i.e. the spatial dimension); and (e) how (i.e. the activities are carried out and the implementation mechanisms). Each of these dimensions themselves also has a number of axes, or sub-dimensions McQuaid (2000). Table 2.2 illustrates the nature of partners’ involvement in a PPP arrangement (The Partnership Matrix) based on McQuaid’s logic.

Table 2.2: The nature of partners’ involvement (The partnership matrix)

<table>
<thead>
<tr>
<th>What</th>
<th>The partnership purpose / objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who</td>
<td>Allocation of roles and responsibilities for each partner</td>
</tr>
<tr>
<td></td>
<td>Key actors in the partnership</td>
</tr>
<tr>
<td>When</td>
<td>What objective(s) to achieve in each development stage</td>
</tr>
<tr>
<td></td>
<td>Who is involved in each development stage</td>
</tr>
<tr>
<td></td>
<td>The stage of partnership development</td>
</tr>
<tr>
<td>Where</td>
<td>What objective(s) to be achieved in each part of the project</td>
</tr>
<tr>
<td></td>
<td>Who is involved in each part of the project</td>
</tr>
<tr>
<td></td>
<td>When to be involved in which part of the project</td>
</tr>
<tr>
<td></td>
<td>The spatial dimension: parts / components of the project</td>
</tr>
<tr>
<td>How</td>
<td>What mechanisms to use to achieve each objective</td>
</tr>
<tr>
<td></td>
<td>Who is involved and how is involved</td>
</tr>
<tr>
<td></td>
<td>What mechanisms to use in each development stage</td>
</tr>
<tr>
<td></td>
<td>What mechanisms to use in each part of the project</td>
</tr>
<tr>
<td></td>
<td>The implementation mechanism</td>
</tr>
</tbody>
</table>

Source: Adapted for the current research from the work of McQuaid (2000)

In general, forms of PPPs may include functions such as: traditional lease, develop, design, build or construct, own, operate and maintain. A combination of these functions can result in different PPP arrangements as shown in Table 2.3, which may include forms such as: Design, Build, Finance (DBF), Design, Build, Finance and Operate (DBFO), Design, Build, Operate (DBO) and Joint Venture (JV) which is a distinct form of PPP arrangement involving public and private bodies assuming some form of equity
Managing PPP infrastructure projects in Jordan

The details of different PPP forms are shown in Appendix 2.1.

Table 2.3: A combination of different PPP forms and modalities

<table>
<thead>
<tr>
<th>Type / Modality</th>
<th>Finance</th>
<th>Design, develop</th>
<th>Construct, Build</th>
<th>Operate</th>
<th>Maintain</th>
<th>Own</th>
<th>Transfer</th>
<th>Lease</th>
<th>Concession</th>
<th>Joint Venture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Design and Construction (TD&amp;C)</td>
<td>✓</td>
<td>✓</td>
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<td></td>
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<td></td>
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<tr>
<td>Operation and Maintenance Contract (O&amp;M)</td>
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<td>✓</td>
<td>✓</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Lease, Develop, Operate (LDO)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
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<td></td>
<td></td>
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<tr>
<td>Build, Own, Operate, Transfer (BOOT)</td>
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<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Build, Own, Maintain (BOM)</td>
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<td>✓</td>
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<tr>
<td>Build, Own, Operate (BOO)</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Build, Operate, Transfer (BOT)</td>
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<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Design, Build, Finance (DBF)</td>
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<td></td>
</tr>
<tr>
<td>Design, Build, Finance and Operate (DBFO)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Design, Build, Operate (DBO)</td>
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<td>✓</td>
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<td></td>
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<tr>
<td>Concession</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Joint Venture</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Developed for the current research

The table shows that the most common PPP form is the one in which the government is utilising the private sector for project construction and building (see also, deBettingnies & Ross, 2004). The private sector, in turn, finds the construction process as an area where it has the utmost potential to justified its involvement in the partnership. Other reasons that explain the rationale for both sectors to enter into partnering relations are explained next.

2.1.3 Rationale for the Use of PPPs

Literature on PPPs has revealed several reasons for both the private and the public partners to enter into partnering relationships. Such benefits can take a variety of forms such as financial and material (e.g. profits, working space and increased transport capacity), or more intangible benefits (e.g. image and knowledge development), besides the added value of synergy (e.g. that is to be able to develop a product with characteristics that would not have been possible without PPPs (Klijn & Teisman, 2003), or the notion that the whole is greater than the sum of its parts (see for example, Lasker, Weiss and Miller, 2001 and Noble and Jones, 2006).
For the public sector, partnering with the private sector gives the government a “new legitimacy: the efficiency of the private sector and the involvement of civil society” (Teisman & Klijn, 2002, p. 197). In addition, there are strengths that are usually seen as evident in the private sector from which governments can benefit. Examples of these strengths include: improving service quality; creating high customer service and management standards; investing in research and development and developing new services; efficient material-based systems; and, reduction of the project’s construction costs that have consistently plagued infrastructure mega-projects (Pessoa, 2008; Siemiatycki, 2010). Other reasons that governments use PPPs may include one or more of: (1) value for money (e.g. lower construction and operating costs and perhaps more efficient operation and maintenance); (2) risk sharing and/or transfer; (3) political attraction (i.e. some governments might find PPPs politically attractive); (4) the production of some goods and services may require a lot of specialised knowledge owned by different organisations (Klijn & Teisman, 2000); and, (5) concerns over the level of the public debt and expenditures (Quiggin, 1997).

The private sector, however, may perceive different reasons for partnering with the public sector. According to Buttery, Fulop, and Buttery (1999, pp. 416-417), there are a number of internal and external triggers accounting for why many businesses form networks with other organisations. Examples of the internal triggers include ensuring the survival of the firm, increased profitability potential, lack of resources and the limited essential expertise and knowledge in markets and cultures. External triggers, on the other hand include: government encouragement and incentives in the form of grants and allowances; taking advantage of a naturally occurring phenomenon; and, spreading business risk by diversifying out of a single economy. These, and other detailed benefits and goal functions that both public and private partners seek from entering into partnering relationships, are included in Table 2.4.

Although the rationale for public and private partners to enter into partnership relationships, explains their needs and stakes in joining into such partnerships, the detailed aspects of these relationships are still under-explored and need to be deeply examined. Understanding the details of why and how partners enter into partnering relationships is assumed to have substantial implications and impact on how the partnership is viewed by partners and consequently, reflect on the way relationships
between them are managed, especially during the implementation phase of a PPP lifecycle, as well as the outcomes of the partnership process itself.

Table 2.4: Rationale of public and private partners to form partnering relations

<table>
<thead>
<tr>
<th>PPP Rationale</th>
<th>The Public Partner Interest</th>
<th>The Private Partner Interest</th>
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</thead>
<tbody>
<tr>
<td><strong>Financial and Economic Goals:</strong></td>
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</tr>
<tr>
<td>Belief that partner can produce more efficiently</td>
<td>♦</td>
<td>-</td>
</tr>
<tr>
<td>Relief of constraints on the budget and strengthening balance of payments</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td>Value for money (i.e. lower construction, operating and maintenance)</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td>Risk sharing</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td>Risk transferring</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td>Lack of resources</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td>Increased profitability potential</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Organisational and Managerial Goals:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved quality of goods and services offered by the other sector</td>
<td>♦</td>
<td>-</td>
</tr>
<tr>
<td>Improved customer service and management standards</td>
<td>♦</td>
<td>-</td>
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<tr>
<td>More investment in research and development</td>
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<tr>
<td>Improved control mechanisms for public services</td>
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<tr>
<td>The need for specialized knowledge owned by other partners</td>
<td>♦</td>
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<tr>
<td>Limited essential knowledge in markets and cultures</td>
<td>♦</td>
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<tr>
<td>Limited technical know-how</td>
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<td>limited management expertise / desire to buy in management talent</td>
<td>♦</td>
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<tr>
<td>Collecting information about a competitor</td>
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<td>Ensuring the survival of the firm</td>
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<td>Government encouragement and incentives</td>
<td>-</td>
<td>♦</td>
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<tr>
<td>Taking advantage of a naturally occurring phenomenon</td>
<td>-</td>
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<tr>
<td>Realisation that market opportunities cannot be exploited solely</td>
<td>♦</td>
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<tr>
<td>Overcoming prejudice in the market by joining with an indigenous partner</td>
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<tr>
<td><strong>Political Goals</strong></td>
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<tr>
<td>Partnerships give the government a new legitimacy (i.e. political attraction)</td>
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<tr>
<td>Increasing involvement of private sector and civil society organisations</td>
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<tr>
<td>The move towards enabling local government</td>
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<tr>
<td>The move towards genuine participation of the local community</td>
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Source: Synthesised and adapted by the researcher from: Al-Nasa’a (2007); Bovaird (2004); Buttery et al. (1999); Klijn and Teisman (2000); Klijn and Teisman (2003); McQuaid (2000); Pessoa (2008); Quiggin (1997); Teisman and Klijn (2002); and Webb and Pulle (2002).

To provide a deeper understanding of a PPP as a phenomenon in its implementation phase of development, several PPP scholars have offered their views and perspectives on why and how organisations from public and private sectors - and sometimes from other sectors, such as non-governmental organisations (NGOs) - enter into partnering relationships. The theory of cooperation, the theory of enforced cooperation, game theory and Huxham and Vangen’s (2000) view can provide further insights into the rationale for ‘why’ organisations to join partnering relationships. Maintaining synergistic momentum (MSM) perspective and PPP development models, on the other
hand, can provide deeper insights into the details of these relationships during each stage of partnership development. The following provides further discussion and a critique of each of these perspectives.

**The Theory of Cooperation**

The theory of cooperation is based on the logic that both public and private organisations have good reasons to cooperate in practice. Private firms are operating within ‘industrial networks’ where they depend on a range of other firms including public sector organisations. Governments are also becoming more and more dependent on the private and semi-private actors for implementing their policies (Teisman & Klijn, 2002). As a result, this requires cooperation with various actors, and therefore, actors enter into partnering relationships. Furthermore, according to cooperation logic, Schaeffer and Loveridge (2002) argued that “all participants expect to end up better off than they would have if they were acting alone” (p. 171).

Although the theory of cooperation is useful to partially offer an answer as to why partners do cooperate, it does not provide an answer to how they actually cooperate in practice, and whether they voluntarily cooperate or are forced to do so by a central authority. The theory of enforced cooperation has existed to explain situations where partners are forced to cooperate.

**The Theory of Enforced Cooperation**

McQuaid (2000) explained the main reasons for cooperation between actors as due to the threat of a central authority, common objectives or (other) self-interest. Although these are the main reasons for cooperation, some key actors are not subject to such central authority or common motives, and they still have their own reasons that ‘force’ them to cooperate.

The theory of enforced cooperation provides deeper insights to explain why partners entering into a partnering relationship are forced to do so due to ‘other reasons’. However, it does not answer the question of how partners cooperate and interact with each other in practice, and whether their cooperation is planned and meant for other reasons. Game theory attempts to explain partnership in a process of reciprocal
cooperation between partners based on their past experience and anticipated future interaction.

**Game Theory**

Game theory is based on the assumption that the partnership process and the interaction and cooperation between the same partners involve compromising and giving concessions whenever possible and needed to gain benefits in future cooperative interactions. The idea of giving out concessions in trade for future gains is described by McQuaid (2000) as a *game* played by partners during the course of their interaction with each other in a partnership arrangement. As such, cooperation between partners is dependent upon a strong chance that these partners (individuals or organisations) meeting again for future interactions. Also, game theory proposes that cooperation between different ‘actors’ can be based upon reciprocity. Individuals (or organisations) pursuing their own self-interest, incentives for cooperation will be greater than for selfish behaviour (even without central authority) (McQuaid, 2000).

Again, game theory may add further insights into the process of partnerships by relating it to the future interaction between partners, however, it does not answer the question of ‘how’ this interaction takes place in practice and what is the nature, frequency and the outcomes of this interaction or ‘cooperation’ among different partners. Huxham and Vangen (2000) looked more deeply into the outcomes of the partnership process.

**The Collaborative Inertia View**

Huxham and Vangen (2000) have offered their view (or approach) to understanding partnerships by elaborating on the phenomenon of partnership *collaborative inertia*. For Huxham and Vangen, *inertia* implies that “it is not uncommon for people to argue that positive outputs have happened despite the partnership rather than because of it!” (p. 294). These researchers explored some of the process-oriented factors (including managing aims, managing language and culture, and managing trust and power) with the aim of providing an understanding of the forces that tend to cause inertia. They found that, although partners may ostensibly agree on a broad label for the purpose of the partnership, at least to the extent that they are willing to be involved, they will each have different reasons for being there. Commonly, some will have much less interest in
it than others, some are involved as a consequence of external pressure (usually from a government), while some are looking at the partnership to serve their personal agenda, which most of which may be ‘hidden’ (Huxham & Vangen, 2000).

Huxham and Vangen’s view to better understanding of partnerships is useful in providing deeper insights into the details of the relationships between partners in the earlier stages of partnership development. However, their view tells very little about the details of the interaction between partners in the more advanced stages of partnership development (e.g. the management and the operational aspects of the implementation stage). Noble and Jones (2006) and Lasker, Weiss, and Miller (2001) have offered their perspective on the details of partners’ interaction during PPP implementation.

The View of Partnership Synergy

The partnership synergy is mainly based on systems thinking and the assumption that the whole is greater than the sum of its parts. Lasker Weiss, and Miller (2001) used this logic to argue that partnership synergy is “the proximal outcome of partnership functioning that gives collaboration its unique advantage” (p. 183). That is by using resources exchangeably and collectively by partners involved to mutually achieve a goal or create something of value that would not be created without this synergistic action or behaviour. Bringing together organisations from diverse backgrounds into a partnership arrangement promotes exploration of differences and explores new grounds for problem solving.

Lasker, Weiss and Miller (2001) also introduced a number of determinants to achieve partnership working and synergy. These included resources, partner characteristics and relationships, partnership characteristics, and the external environment. The assumption was that the positive side of these determinants should lead to some form of synergy between partners in achieving the partnership goals. For example, trustful, respectful, acceptable levels of conflict and power balances in the relationships among partners can greatly help the realisation of partnership synergy, providing that other determinants are available in positive terms.
The model suggested by Lasker, Weiss and Miller (2001) can be very useful to be used as an analytical framework to analyse and assess the partnership synergy and partners’ synergistic behaviour. However, the concept of the partnership synergy is fuzzy and difficult to realise and maintain in many cases. As acknowledged by Lasker, Weiss and Miller (2001), “it is likely that many partnerships do not achieve high levels of synergy” (p. 186). Further, it did not specify what levels of trustful, respectful and power differentials among partners would be acceptable and what and how such values might be created, promoted and achieved in practice.

In later research, Noble and Jones (2006) used the logic of partnership synergy to examine the circumstances that create the synergistic behaviour in PPPs. Using Australian and British PPPs as case studies, Noble and Jones (2006) have examined the behaviours of the ‘boundary spanners’ in the implementation stage of PPPs. The researchers concluded that three factors provided the framework within which the spanners’ behaviour was determined. These included: an absence of an authority figure or organisational hierarchical structure to govern PPP progress, and as a result, many managerial issues have only been resolved through the knowledge, cooperation and agreement of boundary spanners; spanners do their best to sustain PPP progress and success; and, the spanners’ drive for personal success (regardless of the situations where they brought to the project), that stemmed from their commitment for the project success as it was associated with their career benefits. Also, spanners’ length of involvement and their experiences in the PPP project resulted in a more trustful and emotional bonding relationships (e.g. being good friends). More specifically, these situations drove the boundary spanners to adapt and respond to them in a way to ‘maintain synergistic momentum’ (MSM), through a more informal and social interaction and coordinated and collaborated efforts.

The MSM framework, particularly Noble and Jones’ (2006) work, is very useful in providing a more detailed picture of the difficulties that boundary spanners experienced in their PPP projects and explained the strategies that they have adopted to handle these difficulties, particularly, in the absence of an authority figure or organisational structure. However, it does not tell us much about whether the spanners’ personal motives to success correspond with the successful PPP project outcomes. In addition, the strategies

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15 According to Noble and Jones (2006) boundary spanners are individual managers whose work involves bridging the organisational boundaries of PPPs.
that spanners may adopt in situations where they work within the presence of internally well-defined structural relationships and externally well-specified contractual relationships are still under-explored. Yet, we need to know more about the type of the directing and managing skills that the ‘authority figures’ themselves can utilise to sustain the partnership synergistic momentum and the approaches that partners adopt to manage their institutional and cultural differences in other organisational settings such as in Jordan. PPP development models can provide further insights in finding answers to the question of ‘how’ organisations enter into partnering relations and the details of these relationships.

2.1.4 PPP Development Models

It has been argued that, to some extent, PPPs can be seen as a result of separating the purchaser and the provider roles of government (Teicher, et al., 2006). As suggested by Teicher et al. (2006), corporatisation and privatisation allowed the private sector to become an important partner in public service delivery systems. As such, Teicher, et al.’s (2006) contribution may explain how PPPs were originally developed.

In general, PPPs can be conceptualised as progressing through different developmental stages. Yin (1993), for example, has offered his four-stage model of a PPP development and used it as a conceptual framework in his attempt to evaluate the effectiveness of partnership arrangements. The researcher’s model consisted of (in sequential order) the start-up stage, the growth stage, the mature stage and the institutionalised stage. In the start-up stage, the researcher implied that any partnership arrangement is triggered by either internal or external forces or even both together. Consequently, it is assumed that any partnership has come to existence as a result of a strategic planning process by each partner. In its growth stage of development, PPPs “formalise their partnership agreements and work to stabilise their staff resources..” (p. 185). If the PPP was able to survive, it can progress into the stage of maturity, in which the constituent organisations can manage to satisfy their self-interests and at the same time ‘push’ for a broader PPP agenda. Finally, when a PPP is able to grow beyond the maturity stage, it becomes an institutionalised entity and is able to survive possible turnover of its key partners (e.g. constituents) (see Figure 2.3).
It is important to note that the main focus of the current research is on the implementation stage of a PPP development. Therefore, the maturity and the institutionalised stages in Yin’s (1993) model are the stages of a PPP development lifecycle that this study is exploring. The maturity stage in Yin’s model starts when a PPP project starts to produce a good or service that is value for money. Yin’s model, however, does not tell us much about the construction stage of a PPP project. Furthermore, because PPPs are usually new arrangements (and they generally last for more than twenty years), it is too early to see a PPP entity that has reached the institutionalised stage, as ‘theoretically’ proposed by Yin. The researcher’s model, however, is very useful as a theoretical framework that helps in understanding the establishment of a PPP project.

Griffith (2000); cited in Fox & Butler (2004), has also offered a four-stage typology for ‘partnership working’¹⁶ (as described by Fox and Butler, 2004). Griffith’s model for partnership development has been synthesised from a range of literature on partnership typologies into a spectrum of partnership working. Networking, the first stage in Griffith’s model, is characterised by emerging informal relationships between potential partners with the main purpose of exchanging information and experiences between them. It might be possible that networking could develop into cooperation between organisation members as a second stage. Here, as argued by Griffith (2000), members start establishing more formal relationships on an individual rather than collective basis. Coordination is the third stage in Griffith’s model which begins when members start carrying out some pieces of work together towards more collective goals. Finally,

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¹⁶The term ‘partnership working’ is about “individuals from different organisations working together effectively” (Fox & Butler, 2004, p. 41).
integration is the final stage of partnership development when a new structure of committed relationships with a shared purpose evolves (as shown in Figure 2.4).

Source: Adapted by the researcher, from Griffith (2000)

Figure 2.4: Griffith’s (2000) partnership development model

Literature on PPPs shows regular usage of Griffith’s four concepts in addressing most of the partnership arrangements. It is also worth mentioning that Griffith’s (2000) model can be useful in conceptualising the progress of a PPP according to the type of relations that bind parties to each other. However, this model is more about the type of the interaction that takes place in each stage of a PPP development, rather than ‘physical’ progressive stages that can be used to track the actual progress of a PPP project in practice. Therefore, deciding on the most appropriate PPP form is a problematic issue that Griffith’s model was not able to solve. This partially explains why Fox and Butler (2004) decided to address this issue, building on Griffith’s model.

To solve this, Fox and Butler (2004) have used Griffith’s (2000) typology, which consisted of the basic functions (i.e. cooperation, collaboration, coordination and integration) that partnerships typically have, to develop their own typology (see Figure 2.5). In view of that, Fox and Butler added three different levels of partnership development with the aim of identifying what services best fit each of the partnership functions. More specifically, where and when to cooperate, to collaborate / coordinate and to integrate. The three levels were: (1) the strategic level that represents the stage when individual member starts considering the option of establishing a partnership as a priority, that is developed into individual partner strategies; (2) the commissioning level that represents the stage when performance management of services and projects are agreed upon, and; (3) the delivery level that involves moving from a virtual to a physical organisation consisting of all partnership members involved. As a result of this
classification, Fox and Butler have suggested what type of partnership is required for each service level.

Looking closely at Fox and Butler’s (2004) model, it is clear that each of the four functions that were originally proposed by Griffith (2000) correlates to one stage of a PPP development, at least as implied by Fox and Butler in their developed model. The strategic level of service, for example, involves networking and cooperation efforts by ‘potential’ partners. Also, commissioning starts when formal relations between parties are established (i.e. involves cooperation and coordination efforts). For Fox and Butler, integration occurs during the delivery stage of the PPP project lifecycle. It is worth mentioning here that the research at hand is more focused towards the delivery stage of a PPP project. The type of relationships that bind partners during this stage, however, is yet to be explored\(^\text{17}\).

In later research, Grimsey and Lewis (2004a) identified eight major steps in developing a ‘typical’ PPP project and the tasks that should be carried out in each (see Figure 2.6). These steps included: (1) defining the service need; (2) appraising and assessing options for delivery; (3) developing a business case; (4) developing the project; (5) starting the

\[^{17}\text{The type of relationships that bind partners together is discussed further in the literature review on inter-organisational relationships (IORs) and in the later chapters of this thesis.}\]
bidding process; (6) reviewing the project finalisation; (7) conducting final negotiation, and; (8) managing the contract. The main tasks suggested by the researchers to be conducted in the contract management stage (the implementation stage; the main focus of this study) are shown in Figure 2.6.

Figure 2.6: Major steps in developing a typical PPP project as suggested by Grimsey and Lewis (2004a)

In a recent research by Noble and Jones (2006), a model of four distinct sequential stages of PPP development was developed. These include: pre-contact; trawling; sizing up; and structuring the partnership stages (as shown in Figure 2.7). Noble and Jones (2006) explained in more detail the activities that should be pursued in each stage of a PPP development by seeking answers to fundamental questions asked in each stage (see Figure 2.7). In the fourth stage of a PPP development, the researchers asked a very challenging question that should be addressed and tackled in this stage of a PPP lifecycle. That is, how might the partner organisations work together, within the constraints of their divided loyalty and the challenge of finding common ground between them? Answering this question is the main focus of the current research.
In application, the Queensland Government in Australia specified six stages as key milestones in the approval and progression of a PPP (Queensland Government, 2008). These stages are illustrated in Figure 2.8. According to the Queensland Government, the last stage\(^\text{18}\) of the PPP progression process (i.e. Management of Project Agreement) consists of four key elements: (1) formation of the contract management team; (2) monitoring of service delivery; (3) management of variations; and (4) maintenance of the integrity of the contract.

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\(^{18}\)The management of project agreement stage of a PPP development is the main focus of the current study, as it represents the management of the implementation phase of a PPP project.
In Jordan, the Privatisation Law, which was enacted in 2000 and still provides the institutional framework for PPPs, did not specify certain stages or pattern that a PPP transaction should follow. However, it included references to some of the PPP processes that should be undertaken before the PPP contract is finalised and put into place. Some of these included: Service Identification and Specification; Expression of Interest Invitation; Pre-qualification; and, PPP Transaction Studies.

To conclude, the current research acknowledges the contribution that the previously mentioned PPP development models have offered to improve our understanding of the PPP phenomenon in regards to its progressive stages. However, applying any of the previously mentioned models to serve the purposes and objectives of the current research was not deemed appropriate. The PPP development stages that are proposed by most of these models lack clarification and comprehensiveness, and therefore, limit their potential application in the present study. Nevertheless, making use of some of these models, a custom-tailored Two-Phase Model of a PPP development was developed and used in the current research (see Figure 2.9). The first phase involves the emergence and the assessment of a public need. This phase consists of two stages:

- Stage 1 involves the emergence of a public need for a certain product or service. This need is usually handled by one of the public sector organisations as part of its duties and responsibilities.
- Stage 2 involves assessing options for the service or product construction and/or delivery. This activity also falls within the duties and responsibilities of that public sector organisation.

Phase 1 in the PPP development represents the ‘start-up’ and ‘growth’ stages in Yin’s (1993) model, the ‘strategic’ and ‘commissioning’ service levels in Fox and Butler’s (2004) model, stages from one to seven in Grimsey and Lewis’ (2004a) model, the ‘pre-contact’, ‘trawling’ and ‘sizing-up’ stages in Jones and Noble’s (2006) and the stages of ‘service identification’ through to the ‘bidding process’ in the Queensland Government’s (2008) model. Phase 1 is beyond the scope of the current research.

The second phase of the Two-Phase Model of a PPP lifecycle is the management of a PPP implementation, which also includes two main stages:
• Stage 1 is the construction stage which starts when a PPP contract has been signed and the project construction process commences.

• Stage 2 is the service/product delivery and starts after the construction process is completed and continues until the contract expires.

Source: Developed for the current study

Figure 2.9: PPP development stages and the focus of the current study

Phase 2 in the proposed model for the current research represents ‘maturity’ and the ‘institutionalised’ stages in Yin’s (1993) model, the ‘contract management’ stage in Grimsey and Lewis’ (2004a) model, the ‘delivery’ stage in Fox and Butler’s (2004) model, the ‘structuring the partnership’ stage suggested by Noble and Jones (2006) and the ‘management of project agreement’ as specified by the Queensland Government (2008). Phase 2 is the focus of the current research.

It is argued that the ‘custom-tailored’ model that is applied to the current research has the following advantages over other previously-developed models:
Clearness and lucidity. The stages of PPP development, as suggested by many scholars in the field of PPPs, are often confusing, and sometimes, overlapping. An example of overlapped stages are the ‘commissioning’ and the ‘delivery’ stages in Fox and Butler’s (2004) model. It is not so clear where exactly the ‘commissioning’ stage ends and where the ‘delivery’ stage starts. Another example is the ‘contract management’ stage mentioned in Grimsey and Lewis’ (2004a) model that involves ‘finalising management responsibilities’- this activity should have taken place much earlier in the PPP development. This confusion and overlap might be explained by most of the attempts to identify PPP progressive stages being based on theory rather than empirical research. Even those models which have been inducted from field research are lacking operational definition and practical precision, particularly in regards to when exactly one stage of development ends and when the next starts. Models lacking operational definition are difficult to apply them as a framework for other research.

Comprehensiveness. The model that this research suggests has the advantage of looking at the PPP lifecycle from a broader angle, from the time when a need for public service or good emerges, and the options that the government has to fulfil that need. This model also views the process that the government follows and the alternatives that it has (including the option to use a PPP arrangement) to satisfy a public need as a continuous process that involves continuous evaluation and feedback to reconsider other options based on experience and learning. So, it reflects on the reality of how governments might behave if they are faced with a failure in using one particular way of public service procurement and/or delivery. Furthermore, this model considers the environmental forces (political, social, economic, financial, legal, administrative and technological) that have substantial impact on each stage of a PPP lifecycle.

Practicality and applicability. It was concluded that some of the PPP development models found in the field of study were impractical to be used for the current research. An example is found in Griffith’s (2000) model, which used the concepts of networking, cooperation, coordination and integration to characterise each stage of a PPP development. While this is useful for mapping out how relationships develop over time, it is impractical as a research framework focusing on a particular stage of a PPP development.
To conclude, explaining the rationale for establishing partnerships, as well as, identifying progressive stages of a PPP and how it develops over time is very important because this offers insights and a better understanding of the nature of partnership arrangements and its impact on the effectiveness of managing PPPs. However, a PPP theory or model that provides a satisfactory answer to the question of how organisations actually partner in practice during the implementation phase (construction and operation stages) of a PPP lifecycle is not yet available. A detailed knowledge is still needed of how partners interact in practice, and how effective they are in addressing and managing their differences in this critical phase of implementing a PPP project. A measurement framework for PPP effectiveness is also required to be used to examine the management practices during the implementation phase of a PPP project lifecycle.

2.1.5 PPP Effectiveness Measurement Framework

In this section the effectiveness of PPP projects will be examined in terms of how it has been viewed and addressed by different scholars in the field of PPPs, followed by viewing the management effectiveness of the selected projects used in the current research.

There appears to be some consensus among scholars in management about the general meaning of effectiveness to imply the ability of an organisation to achieve its goals. Goals can be anything ‘legitimate’ that justifies the existence of an organisation. However, it is possible for a PPP to have vague partnership goals as well as a huge potential array of these goals (Hodge & Greve, 2007). In addition, because of the complicated nature of partnerships as hybridised arrangements, the conventional effectiveness measures may not be adequate to include ‘the relational operating style’ of these ‘networks’, and therefore, they require different evaluation processes and tools to be employed (Mandell & Keast, 2008).

Furthermore, effectiveness as a concept, can be specifically ‘operationalised’, defined and conceptualised when it is utilised in a particular organisational setting or context. This is evident in the PPP literature where different effectiveness criteria were developed and used by different scholars to serve their attempt to evaluate the effectiveness of ‘particular’ organisation, entity, function, role, initiative, project or to
express their own views about a particular object. Effectiveness, as such, can become a more complicated issue when it is viewed differently by people with different backgrounds in different organisational settings. Performance effectiveness measures, when they are custom-tailored to serve certain purpose, will greatly limit their applicability to other situations. In this regard, Chamala (1995) argued that those who are external to the partnership, for example, may view it poorly because they have used indicators that are relevant to their own goals, rather than those of the partnership itself. This entirely explains why we do not yet have a solid, agreed upon or ‘ready-made’ criteria for effectiveness to use in any type of organisational or inter-organisational settings.

The concept of effectiveness can also become more problematic when it is confused by the use of the term ‘success’. A successful organisation, for example, may or may not have been effective in achieving its goals. Anon (1991), for example gave different definitions for these two terms. For the researcher, being effective means “serving to effect the purpose; producing the intended result” (p. 558). Being successful, on the other hand, means “gaining of wealth, position or the like” (p. 1745). Oliver (2004) stated that a “partnership may be judged a success for its ability to attract sponsorship and media coverage, but may be quite ineffective at achieving its stated purpose” (p. 73). Nevertheless, success, although denotes a narrower meaning than effectiveness, it has mostly been used by many scholars and practitioners to mean effectiveness. Wondolleck and Yaffee (2000), for example, have used the two terms synonymously. The current research, however, views success as an important indicator for effective performance. This is also triangulated with the participants’ perceptions of the effectiveness of their performance, as discussed later in this section.

In a specific view on how to evaluate the effectiveness of a PPP project, Yin (1993) could identify the aspects that should be evaluated in each stage of a PPP development (see Figure 2.10). In the start-up stage of a PPP development, for example, ‘evaluators’ should seek answers to a set of questions about the internal and the external forces that triggered the partnership, as well as the strategic planning process followed to decide on its initial programs and projects. The primary question that needs to be asked in the growth stage is whether the partnership was able to identify the resources necessary for its growth, as in this stage partnerships tend to formalise their agreements and to work
towards stabilising their resources. Effective partnerships in the mature stage, as argued by Yin (1993), usually manage to serve the self-interests of their constituent organisations, which at the same time, pursue broader partnership agenda. Finally some partnerships grow beyond the mature stage and actually become an institutionalised unit of governance. An institutionalised partnership survives the turnover of its key partners and is often marked by “resources infusion from an institutionalised source” (Yin, 1993, p. 186).

Yin’s (1993) approach could be useful in providing a broad framework for analysing the effectiveness of a PPP project. However, this framework lacks the detailed view of how each item within each stage could be evaluated. It also implies a ‘value-free’ judgment of the items listed in each stage. Identifying the external forces that initiated the partnership, for example, would not be sufficient by itself to offer a more applicable effectiveness measurement. It could be useful to identify these forces to provide us with insights into the degree of the impact that these forces can pose on a PPP project, and therefore, assess the ability of the internal management to effectively manage and relatively control these forces. Additionally, as discussed before, there is still relative confusion among scholars in the field of PPPs about partnership development stages themselves. More specifically, agreement among PPP scholars and practitioners on where and when does one stage end and the next start, is not yet available. As such, the projects investigated in the current research fall somewhere between the growth and the maturity stages on Yin’s (1993) model. And it is more focused towards the effectiveness of PPP projects during their implementation phase of development. This

Source: Adapted by the researcher from Neal (2010), based on Yin’s (1993) typology

Figure 2.10: Effectiveness evaluation in each stage of a PPP development
makes it difficult to use Yin’s approach to the current research. Yet, Yin’s (1993) model can be helpful to inform the choice of a more valid and applicable effectiveness measurement framework.

Hodge and Greve (2007) confirmed the difficulty of assessing PPPs and argued that a comprehensive evaluation of the PPP phenomenon would require assessments of all PPP types that cover a host of operations including financing, design and development, operation and ownership. However, because of the difficulty to do so as assessments so far have been too early in the life of the projects to be reliable, the researchers have focused on one PPP model (the PFI infrastructure provision), and evaluated the degree to which this model appears to have been successful, by looking at the international empirical experience. As a result of their evaluation, the researchers concluded that PFI-infrastructure has delivered contradictory evidence as to their effectiveness. The researchers called for greater care in carrying out future evaluations away from the policy cheerleaders.

On the application side, the JEI success was defined by its ability to meet a 10-basic criteria (and reflecting on any other partnership initiative). A successful partnership should be: (1) scalable (projects can be scaled up, nationally rolled out, economically viable and practically operational); (2) achievable (well planned, and therefore realistically achievable); (3) replicable (project can be reasonably recreated with new applications, in new environments or in other countries); (4) sustainable (contributes in building innovative business models, maintains local knowledge, manages capacity and be accepted and bought-in); (5) action oriented (project is relentlessly proactive and achieves its goals); (6) resourced (well staffed with funds, resources and experts and appropriate senior management and leadership); (7) multi-stakeholder (seek out and engage all relevant people in the process); (8) driven (strong leadership, clear ownership, well-defined tasks); (9) holistic (looking and working towards achieving wider outcomes); and, (10) building capacity (gearing the methods and approaches used for the project to assist building local capacity). These requirements should be guided by measurable results that can be continuously checked, reported and managed (Hamam, et al., 2008).
The JEI’s criteria for a successful partnership can be most useful in providing an holistic view and broad measures to assess how successful is a PPP project in meeting these criteria. The current research however, is more focused towards those criteria in the JJ’s model that are particularly related to the management of the implementation phase of a PPP development and, at the same time, can be applicable to the current research. These criteria are: scalable, action oriented, resourced, multi-stakeholder, driven, capacity building and, measurable results. Nonetheless, using these criteria to assess the degree of a PPP ‘success’, is challenged by differences in views among evaluators on what can be considered as, for example, a sustainable partnership. The effectiveness of the partnership depends on the partners themselves and how they perceive cooperation and working together.

Finding an appropriate effectiveness measurement framework to be used in the current research was difficult to achieve for many reasons. Firstly, agreement on a set of criteria to measure the effectiveness of the selected partnership projects is not yet available among PPP scholars. Secondly, PPPs are long term arrangements that usually last for 35 years. They are established and developed throughout a number of stages, starting from the policy making to the tendering and bidding processes to the construction stage and then the operation stage until the end of the contract. Therefore, what would be most applicable to one stage might not be the most appropriate to be applied in the other. Thirdly, variation in views is most likely to occur in situations where different people with diverse organisational backgrounds and different stands and agenda, develop and adopt their own effectiveness standards. The absence of an independent body to help in assessing PPP performance effectiveness would leave the issue of subjective judgment unresolved.

Given the above discussion, and taking into consideration the difficulties involved in each of the approaches to assess the effectiveness in managing a PPP project in its implementation phase, the current research will adopt an approach that considers the perceptions of PPP senior managers in viewing the effectiveness of their PPP projects. This approach has been used by many scholars in the field of research. Wondolleck and Yaffee (2000), for example, used the positive perceptions of multiple participants from a diversity of backgrounds in multiple case studies, to define success in investigating collaboration in natural resource management (NRM). They have noted that
improvement (e.g. used as a notion of success) in human relations would lead to improved social outcomes (e.g. used as a notion of effectiveness). This approach was also used by Pearce (2001) to ‘look inside’ the joint venture (JV) to help understand the link between cooperation efforts and JV performance outcomes, by considering the perceptions of the top executives, knowledgeable persons and top managers inside each of the studied JVs as key informants in his study. Also, Oliver (2004) suggested that participants from several backgrounds may be asked whether or not ‘things are better’ as a result of their partnership work. Oliver (2004) confirmed that “a positive response may well be a useful indicator that the relationship was successful” (p. 73), and “what participants think of the relationship is an important measure of its effectiveness” (p. 74). Most recently, Mandell and Keast (2008) seemed to agree that network effectiveness evaluators “should become more comfortable with the legitimacy of evaluations done by the participants themselves and not just experts in the field of evaluations” (p. 729).

Following the approach of considering participants’ perceptions also has the advantage of obtaining ‘discrete’ results about how effective PPP projects are, as perceived by top officials in each side of the partnership in each project collectively. PPP senior managers are assumed to be knowledgeable informants in their fields, and therefore have a more focused and practical view, backed by their knowledge of the progress that they have made in a particular point in the project life-time.

Pertaining to the above discussion, the current researcher is aware of the limitations of adopting the views of practitioners in the field of study, which may be bias and subjective. Further, the current researcher argues that the projects’ senior managers did not have any perceptible interest in expressing views differently from what they actually believe and how they see things, providing that they were assured of the confidentiality of the information that they have given. Additionally, they were asked to give specific practical examples on different occasions, during the interviews and throughout the later follow up process, to support and triangulate the information that they had already given. Furthermore, participants’ perception about the effectiveness of their performance was also analysed in light of the overall objectives of their PPP project, as a supportive triangulation mechanism (a method used by Oliver, 2004). Moreover, this analysis was also conducted in a way that involves comparing managers’ performance
outcome (of managing a problem they have experienced, for example) against what would most likely have occurred if nothing at all were done to address that problem, an approach suggested by Long and Arnold (1995) as a useful way to evaluate collaboration and partnership effectiveness.

To summarise, the previous discussion on PPP theoretical perspectives, and on effectiveness as an important construct in managing PPPs, revealed that PPPs are lacking in a well-established theory or set of theories that can assist in providing a theoretical framework for the study at hand and which can be empirically verified and tested. The few theories that exist are mainly based on offering a better understanding of the partnership phenomenon and the rationale, the situations and when and why organisations might join a partnering relationship, particularly in the initial stages of a PPP development. The extant theories can only be classified as prescriptions of what a successful partnership ‘should’ be, and at the same time, are less focused towards the realities of the implementation phase of a PPP development. Hence, most such research is lacking empirical verification and field authentication. However, having said this raises an important question of what a universal PPP theory should look like, and what might need to be done to achieve that? The following section further explains this important issue, and relates the current study to efforts to produce what can be regarded as a ‘universal’ PPP theory.

2.1.6 Working towards a Universal PPP Theory

A universal PPP theory should be able to give very useful insights into the best type and way to start a partnership that ‘guarantees’ positive results or successful outcomes. To do so, a PPP arrangement should go through a number of well-structured procedures and consider number of factors that have substantial impact on each of these stages (see Figure 2.11).

Given the above discussion, it is important here to note that there is a lot to experience, explore and learn about PPPs in practice and theory. In practice, we are still at an early stage of PPPs development given their relative recent introduction to public policy worldwide as an alternative to traditional procurement or other options available to the government for service production and/or delivery (see also Grimsey & Lewis, 2004b).
In theory, all of the components that are mentioned in the proposed model of contributing to what can be regarded as a universal PPP theory need further exploration and examination by conducting more research to this vital field. Nevertheless, the current research can be considered one of the attempts to provide a more detailed view of one important, though the least researched aspect, of the proposed partnership model. More importantly, this model can possibly be replicated in other PPP contexts, and can be useful in understanding other organisational phenomena that have social and cultural influences imbedded in them.

2.2 A REVIEW OF PREVIOUS RESEARCH ON MANAGING PPFS

Scholars in the field of PPFs argue that most of the PPP challenges are emerging from management of the implementation phase of project development and are managerial problems by their nature (see for example, Noble & Jones, 2006; Weihe, 2008). In their
analysis of 25 community partnerships, Shortell et al. (2002, p. 75) found that the more successful partnerships were those with the ability to anticipate, manage, and channel conflicting situations. In fact, not much is known about “how the public and private actors in PPPs co-operate in practice, and how this affects performance” (Weihe, 2008, pp. 153-154) particularly in the implementation phase of a PPP lifecycle.

It is important to note here that “the absence of widely known PPP models, summaries of key experiences and shared lessons learned, makes the start up and monitoring of partnerships more challenging” (Mann, Pier & Yasin, 2007, p. 1), thereby making the successful implementation of effective partnerships difficult to achieve (Unwin, 2005). Other institutional and situational barriers, as described later, are also among the challenges that may be facing a PPP in the implementation stage of the lifecycle (Webb & Pulle, 2002). Further, difficulties in PPP implementation involve situations where partners are lacking managerial skills, experience and knowledge in managing such ‘hybrid’ organisations. There is also a need for well-established performance control systems to oversee the effective management of PPP project implementation. The following sections elaborate further on these four main important issues that face PPPs in the management and implementation phase. Challenges in implementing PPPs in the Jordanian context are discussed next.

2.2.1 Effective Practices in Managing the Implementation Phase of PPPs

A number of PPP scholars attempted to describe what can be considered as prerequisite requirements, practices and/or factors that are important to the effective management of PPPs. Schmieg and Climko (1998), for example, suggested certain ‘critical’ steps in developing a strategic plan for modern public-private partnerships. The plan includes (in sequential order): clearly establishing the partner’s mission; identifying a common language; establishing a Ulysses¹⁹ contract; maintaining flexibility and pacing; developing shared solutions; delegating trust; determining expectations; and finally, creating empowerment.

A simplified view of Schmieg and Climko’s (1998) critical steps, although sequentially ordered, suggests that these steps can be organised under two main management

¹⁹ Used to mean the availability of a contingency plan in the expectation of a disaster ahead. It also means that the ultimate vision must not be forgotten in the midst of rough seas (Schmieg & Climko, 1998).
processes categories: prerequisite procedures and ongoing practices. Figure 2.12 shows the two categorised steps that are considered critical in developing a PPP strategic plan.

**Figure 2.12: Critical steps in developing a PPP strategic plan**

In similar research to identify critical success factors (CSFs) that are program-level specific, as concluded from a detailed analysis of reports, program documents and project agreements for a number of UK, British Colombian and Canadian PPPs, Abdel Aziz (2007) identified a number of principles as important characteristics for PPP implementation at the program level. The availability of PPP institutional / legal framework and policy and implementation units, perception of PPP objectives and performance and method specifications were among the critical success factors for implementing PPPs. To successfully manage these issues, the researcher called for two fundamental elements to be established: a PPP business unit to carry out the implementation activities and a legal framework (i.e. laws, policies and processes) within which the unit would work. The researcher suggested that these principles and guidelines should be viewed as ‘strong’ criteria for a successful PPP implementation.

Other several important factors that contribute to the successful implementation of PPPs were identified by Jacobson and Choi (2008). Among these factors that are related to this study were: (1) partners’ unified specific vision and commitment as the first step for partnering; (2) open communication between partners and their willingness to compromise; and, (3) respect, clear roles and responsibilities. Other critical success factors (CSFs) to the implementation of PPPs were identified by Harris (2004) and Ahadzi and Bowles (2004). Reflecting on the UK PPP experience, Harris (2004) identified six CSFs that are directly related to the program-level. Among these was the availability of a PPP well-defined contract that details the relations, roles and
responsibilities of the both sides of the contract: the private and the public partners. In the same vein, Ahadzi and Bowles (2004), however, identified the attributes that affect the efficiency of the PPP process in the UK that are directly related to the government side of the contract. These included: (1) the technical capabilities (e.g. established project parameters and in-house expertise); (2) organisational capabilities (e.g. commitment and level of collaboration with the public sector team); and (3) financial capabilities.

Identifying practices and issues that are closely related to the management of the implementation phase of a PPP lifecycle is an important step towards the effective management of PPPs. However, there are also difficulties that can hinder the effectiveness of PPP organisations. These are discussed next.

2.2.2 Difficulties in Managing the Implementation Phase of PPPs

Because the implementation process of the partnership can have significant consequences for performance, Weihi (2008) argued that attention should therefore be directed at managing this process, as it is an important aspect of a PPP project. Weihi (2008), using research findings from a qualitative case study of five different PPPs in the UK, found that the majority of the analysed cases resemble the exchange type of partnership more than the collaborative type (presented in Table 2.5).

<table>
<thead>
<tr>
<th>The collaborative partnership</th>
<th>The exchange partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Distrust</td>
</tr>
<tr>
<td>Reciprocity, tit-for-tat strategies</td>
<td>One-sidedness, non-mutual approach</td>
</tr>
<tr>
<td>Attractiveness/ empathy for partner</td>
<td>Incomprehension, minimal attractiveness</td>
</tr>
<tr>
<td>Positive and proactive attitude/mindset</td>
<td>Unenthusiastic and reactive attitude</td>
</tr>
<tr>
<td>Close relationships</td>
<td>Distanced relationships</td>
</tr>
<tr>
<td>Shared purpose/joint goals</td>
<td>Split purposes</td>
</tr>
<tr>
<td>High intensity/connection</td>
<td>Low intensity/connection</td>
</tr>
</tbody>
</table>

*Source: Weihe (2008), p. 155*

A successful plan to manage a PPP can only be achieved by identifying obstacles that may hinder the successful application of a PPP and developing solutions for them. Fox and Butler (2004) have investigated the obstacles that face partnerships in their
implementation in achieving ‘effective partnership working’. Based on their own knowledge and research of government, inspectorate and academic body materials, the authors have identified a number of obstacles that particularly relate to the management aspects of the partnership contract. These obstacles included: poor level of partners’ engagement and representation; competing partners’ ideologies; partners’ conflicts and poor decision making; lack of clarity on roles; lack of trust and the inability to manage the ‘people issues’; and finally, poor performance management. Fox and Butler (2004) suggested that achieving ‘effective partnership working’ needs a well-established partnership based on some form of local needs analysis; involving service users and communities in the partnership process; having a well-established governance framework that clarifies partners’ responsibilities and accountabilities, and; having performance measures “to ensure that the partnership is making a difference” (p. 37).

Broadly elaborating on some of the obstacles that have faced three partnership projects in the transportation infrastructure sector in the UK, Canada and Australia, Siemiatycki (2010) concluded that the international experience has often been that PPPs are inflexible arrangements as they involve long-term contracts, prolonged conflicts arise between partners (i.e., over the setting of tolls, service quality and the planning of new competing facilities) and ending the partnership before the end of the contract in a large number of cases.

In a more specific research on the challenges facing the partnership process, and using multiple case study and grounded theory approaches, Jones and Noble (2008) examined the role that ‘boundary-spanners’ play to maintain synergistic momentum (MSM) behaviour during the implementation stage of PPPs to handle these challenging situations more effectively. They concluded that three factors provided the framework within which the behaviour of boundary spanners is determined. These factors were: (1) the absence of an authority figure or organisational hierarchical structure to govern the PPP’s progress; (2) spanners who do their best to sustain PPP progress and success to maintain project time frames; and (3) the spanners’ drive for personal success regardless of the situations which they brought to the project. These researchers also concluded that the length of involvement of boundary spanners in the PPP project, (e.g. having worked together since the ‘trawling’ and ‘sizing up’ stages), results in a more trustful
and emotional bonding relationship among them (see also, Knickman & Stone, 2007; Oliver, 2004).

Johnston and Gudergan (2007) used document review and interviews to analyse the challenges which faced the partnership of the Sydney Cross City Tunnel (CCT) toll-way 2006 that resulted in its failure. The researchers explained the CCT failure within the technical-rational governance context (as opposed to the social and the risk contexts of partnerships), due to unforeseen risks. The difficulties in the technical-rational governance system led to a breakdown in the social contract, through political risk. For the researchers, rationality in the general setting of management practice, assumes logical and linear decision-making that is reflected in the legal contract binding the partners and encompassing all the necessary elements for ensuring goal-oriented projects are carried out in accordance with defined processes. For Johnston and Gudergan (2007) and Johnston (2010) this was not the case in the CCT as “the technical-rational processes of negotiation and contract development were flawed to a considerable extent” (p. 580). These researchers asserted that greater knowledge and experience are still needed in the hybridised organisational forms.

Looking deeper into the CCT ‘failure’, however, reveals further problems which faced this project during its implementation phase, that are mostly related to the operational aspects in managing this project. For example, partners were in dispute for a long period of time around certain issues without reaching agreement. As a result, problems were left unresolved and became chronic, meaning that later remedial actions were not possible. Other examples of managerial-type problems during the CCT implementation phase were: lack of coordination between partners exemplified by unilateral actions by one partner; changes in the government office employees; and other issues related to health and safety practices during the project operation and construction. A detailed analysis of the problems faced by the CCT during the implementation phase of the project is provided in Appendix 2.1. In this regard, it is argued that this is the type of analysis that is needed to have a closer view of what is happening during the implementation stage that might lead to the success or failure of PPP projects.

Faced with patronage and revenues well below expectations, CCT went into receivership in the end of 2006. Some members of the consortium wrote off their stakes in anticipation of significant losses. The facility was sold in June 2007 to a private operator (Johnston & Gudergan, 2007; Siemiatycki, 2010).
The studies conducted by Weihe (2008), Schmieg and Climko (1998), Fox and Butler (2004), Johnston and Gudergan (2007) and Jones and Noble (2008) have substantial implications in providing a detailed view about the management aspects in the implementation phase of a PPP project, that go beyond the formal contract to investigate what happens at the micro-level processes, and how partners cooperate or collaborate in practice. However, these studies did not offer deeper insights into the type and the nature of the interaction between partners and the ‘soft concepts’ and management skills that are necessary and most needed in managing PPPs in practice in the implementation phase of PPP development.

To capture and elaborate on soft concepts of the partnership in the implementation phase (such as processes, dynamics, trust and goodwill), and to investigate further the partnership management aspects, Weihe (2008) suggested that there is a need to conduct more empirical qualitative research to map out what goes on within the ‘black box’ of partners’ co-operation. More specifically, Weihe (2008) suggested that such research should be directed to address and find answers to the following research questions: How does interaction between partners take place in practice? What is the pattern, frequency and content of this interaction? And, how does institutional context influence the way PPPs are implemented?

To conclude, a deeper understanding of what might be happening in the implementation phase of a PPP lifecycle has received very little scholarly attention. Further research in this area is needed to explore effective PPP management. Noble and Jones (2006), for example, argued that “.. the existing literature is concerned with examining PPPs at only the broad social or organisational level, thus providing few insights into the ongoing managerial life of a PPP” (p. 893). Further discussion of other forms of the challenges facing the management of the implementation phase of a PPP project and particularly, the institutional and organisational differences between partners is provided next.

### 2.2.3 Managing the Institutional Differences of the Partners

Special attention was given by this study to the institutional differences between partners. Deep concerns were raised by many PPP scholars about the differences
between partners due to differences in the institutional settings that normally exist between public and private sector organisations, and their impact on the effective performance and management of PPP projects (see for example, Klijn & Teisman, 2000; Ramiah & Reich, 2006; Teisman & Klijn, 2002; Tierney et al., 2010; Mann, Pier & Yasin, 2007; Klijn & Teisman, 2003; Vining & Boardam, 2008). It has been argued that in the ‘real world’ it is rare for an opportunity to emerge where two very different public and private sector organisations work closely together in partnership (GoJ & WEF, 2004). It is also increasingly recognised that “bridging the different goals, values, and processes of public and private organisations is hard work” (Ramiah & Reich, 2006, p. 396). Given that argument, there are number of institutional and organisational challenges associated with the application of PPPs. In practice, while partnerships are assumed to be based on mutual and equal cooperation, there seems to be a scarcity of projects set up jointly by public and private actors. Klijn and Teisman (2000), for example, found that partners have little joint decision making and continuity in cooperation. They stated that:

[There are] “various institutional barriers, which are related to the classical separation of the public and private sectors [...] each of these worlds believes to require its own institutional framework with special rules” (p. 90). “Both parties tend to give priority to their own considerations, which has led to classical principal-agent problem” (p. 88). “... sticking to one’s own narrow interests can lead to very meagre results” (p. 93).

Klijn and Teisman (2000) also elaborated further on the problem of competing self-interest between partners and the classical separation between both sectors (e.g. market versus hierarchy). They argued that this problem leads to a dilemma: “the planning process is being organised by public actors, reducing the private actors to simple implementators” (p. 88). As a result, the private partners may not feel responsible for carrying out the government’s master plan. They concluded that “tensions that arise from the interdependency and competing self-interests of the partners have to be solved adequately: they will not disappear by themselves” (p. 93). To make partnerships work better, the researchers suggested a mixture of three types of strategies: process management, project management and network constitution strategies.
Exploring the gap between partners and the ‘phenomenon’ of classical separation between public and private partners was also a subject of further research by Teisman and Klijn (2002). Based on an analysis of a prominent case of Mainport Rotterdam in the Netherlands, the researchers concluded that the existing governmental organisations were not yet capable of developing partnership schemes in practice. This is why, as argued by the researchers, the Maiport Rotterdam initiative could not form a public-private partnership arrangement, despite the efforts from both sectors since the year 1997. This argument is consistent with Keast et al. (2004) conclusion that addressing complicated public policy problems using a networked, collaborative arrangement requires the public sector to develop new and innovative ways of thinking and doing beyond the traditional management styles.

Elaborating further on the differences between the public and the private sector partners, Teisman and Klijn (2002) suggested that PPPs call for an exchange of information between actors and a willingness to look for mutual solutions. However, public actors do not always behave in this way and want to retain their primacy within the process and as a result, private partners will not bring their knowledge and their efforts into the partnership. The researchers also argued that the public sector is based, to a far greater extent, on hierarchical demand mechanisms that are controlled by the top administrators and politicians, and that, “the government is unwilling to abandon its formal superior position, mainly because hierarchy is the only representative democracy model ‘we’ are familiar with that has shown its quality” (Teisman & Klijn, 2002, p. 199). For these researchers, this is a serious obstacle to achieving synergy and finding new solutions.

Further differences between partners were identified by Tierney et al. (2010). The researchers identified four key challenges and barriers to partnership success in the ‘global’ e-health sector. The first two of these challenges confirm the presence of partners’ differences in cultural and geographical settings as well as partners’ miscommunication and misunderstanding. An example of the partners’ geographic distances, is workdays might not overlap given that being located in different

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21 In this regard, Schaeffer & Loveridge (2002) mentioned that the private sector partners might fear that sensitive information may be available to their competitors because of the lack of confidentiality in the public sector and consequently, may limit their cooperation with the public sector partners.
continents, which made effective communication a challenging effort\textsuperscript{22}. Another example is the differences in expectations that exist between partners (e.g. over the privacy issues for health care information that may vary greatly between cultures)\textsuperscript{23}. Such differences, as argued by the researchers, can become “major impediments to transnational collaboration especially among in-experienced partners” (p. 271). Nevertheless, to help prevent or minimise such differences, Tierney et al. (2010) suggested establishing a mentoring relationship between the more experienced partners and those who are less experienced. Similarly, Ramiah and Reich (2006) stressed the importance of partners’ willingness to develop and utilise formal and informal mechanisms that promote regular information-sharing to learn more about the partnership with experience of their interaction.

It is important here to acknowledge the negative impact of the differences in expectations between partners on certain issues that have substantial effect on the performance of the partnership. Such differences are mainly attributed to the differences in the ways of viewing and addressing issues by each partner. The Cross City Tunnel (CCT) in Sydney, Australia (2003-2007) experienced such differences in expectations and views between the private and the public partners over the design of the project and other operational aspects (Table 2.6 shows examples of these differences). This happened concurrently with very little communication initiated between partners to address and sort out their differences in a timely manner\textsuperscript{24}. Further, in the operational and management aspects of the CCT, lack of communication between parties resulted in deterioration in partners’ relationships (see for example, Johnston & Gudergan, 2007; Siemiatycki, 2010). At one point in time, “most of the governmental employees, including the main government negotiator, were either dismissed or resigned” (Johnston & Gudergan, 2007, p. 575), and therefore, communication was lacking between partners.

\textsuperscript{22}In their in-depth qualitative research, Sole and Edmondson (2002), cited in Houldsworth and Alexander (2005) saw virtual teams grapple with differences in time zones and non face-to-face media of communication.

\textsuperscript{23}For such differences, see also, Schaeffer and Loveridge (2002, p. 172).

\textsuperscript{24}A detailed analysis of the problems faced in the CCT during the design and the implementation phases of the project development, is provided in Appendix 2.2. It is acknowledged here that the CCT was used on several occasions in this thesis to reflect on the importance of managing the differences and the relationships between partners, and therefore was only taken as an example.
Table 2.6: Differences in views between the public and the private partners in CCT

<table>
<thead>
<tr>
<th>Issues of Concern</th>
<th>The Differences in Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project’s design</td>
<td>The original proposed design was 1.2 kilometres in length</td>
</tr>
<tr>
<td></td>
<td>Proposed 2.7 kilometres in length</td>
</tr>
<tr>
<td>The total project’s cost</td>
<td>Estimated AUS 680 million</td>
</tr>
<tr>
<td></td>
<td>Estimated AUS 846 million</td>
</tr>
<tr>
<td>The anticipated patronage rates</td>
<td>60,000 users</td>
</tr>
<tr>
<td></td>
<td>90,000 users</td>
</tr>
<tr>
<td>The suggested user toll fees</td>
<td>AUS 2.00 per trip</td>
</tr>
<tr>
<td></td>
<td>AUS 3.65 per trip</td>
</tr>
</tbody>
</table>

From: Johnston (2010); Johnston and Gudergan (2007); and Siemiatycki (2010)

In fact, establishing communication channels between partners was one of the several important factors that were identified by Jacobson and Choi (2008) to contribute to a partnership’s success. Neal (2010) also added that PPP management and leadership should have the capability to engage its members in a way that creates an environment that promotes effective internal and external communication and synergistic relations. According to Lasker, Weiss and Miller (2001), ‘synergy’ in partnerships, can only be achieved if the partnership management is being able to exert flexible and supportive roles rather than being rigid and conform to the traditional and bureaucratic control systems. Moreover, to assist partnership members to take timely decisions and to assess partnership functioning, an efficient documentation and analysis system should be created. For Lasker, Weiss and Miller (2001), the proper management of these aspects together acts as “the ‘glue’ that makes it possible for multiple, independent people and organisations to work together” (p. 194).

Tierney et al. (2010) stressed the importance of establishing effective communication channels between partners who, at the same time, were willing to communicate with one another to coordinate their various activities. However, establishing effective communication, especially at times of conflict between partners, is very difficult to achieve. Neal (2010) confirms this difficulty, as this “is not an easy task when partners come from diverse racial, economic and professional backgrounds.. in some instances, member organisations remain wary of each other’s motivation and are not ready to share their resources or power” (p. 181).

Two main challenges facing partnerships identified by Mann, Pier & Yasin (2007) are of great importance: working rhythms and partner disparity. They argued that:

[In terms of the differences in working rhythms], “the public sector is apprehensive about the private sector’s fast track and feels misunderstood in terms of its processes.
Private sector representatives complained about the government’s slowness in action and bureaucracy” [in terms of partner disparity], “a very serious pitfall is for a partner to underestimate another partner” (p. 5).

The details of the differences between public and private partners and their impact on the cooperation process between them is well-explained by Schaeffer and Loveridge (2002). The researchers pointed to important philosophical, managerial and legal differences between private sector and public sector organisations. The researchers argued that differences in issues such as the mission statements, accountability, decision making processes, power, risk and the ways and scope of work across both sectors, are deeply reflected in the way each is managed, and therefore of their views of ongoing cooperation.

The process and outcomes of the differences between partners was also a research issue addressed by Klijn and Teisman (2003) who agreed that “rules can differ between networks, can conflict with one another or can simply block interaction with actors from other networks.. [and].. while interdependency between actors is the reason for the cooperation, it may also lead to inertia and interaction blocking” (Klijn & Teisman, 2003, p. 142).

Many other researchers confirmed the existence of conflicting goals between public and private partners. Vining and Boardam (2008), for example, found that conflicting goals between public and private participants are most likely to raise transaction costs and externalities. They argued that the private sector wishes to maximise risk-adjusted profits over life of the contract, whereas the public sector wishes to minimise the sum of the expected short-term, on-the-budget expenditures and political costs. The details of these objectives are important, because they foreshadow the reasons for conflict in managing PPPs (Vining & Boardam, 2008).

Addressing and effectively managing the differences among various partners before they become chronic and result in a PPP failure is an issue of great importance. This is well evidenced in the case of the CCT project in Australia in 2007 when partners acted bilaterally on certain issues with the least involvement, and sometimes, the absence of the other party until unresolved issues got to a stage where possible remedial actions to resolve them were impossible (see also, Johnston & Gudergan, 2007; Siemiatycki,
2010). That is why Pessoa (2008), suggested that there must be some ongoing set of interactions, an agreement on objectives and methods, as well as a division of labour among partners to achieve the PPP project goals. There must be “an interest and a commitment of some individuals to make PPP happen” (p. 313). Pessoa (2008) also suggested a shift in the roles and attitudes of public and private entities, for the public authorities to move away from the usual client-contractor approval towards focusing on the core functions of supervision and regulation, and for the private sector to assume greater responsibility and risk in execution, operation and mobilisation of resources. The third ‘P’ entails a joint alliance between the two sectors beyond the traditional contractual relationship (Pessoa, 2008).

To summarise, the dilemma of the classical division between public and private sector, or market and hierarchy, have a very substantial implication in PPP theory and practice. However, it does not tell us much about the details of the context in which PPPs operate or interact in reality (Klijn & Teisman, 2000) nor the details of the content of this interaction that could lead to, or increase, the gap between partners. In addition, most of the research in this area can be regarded as a set of prescriptions that need further empirical verification, to examine the impact of partners’ differences on the management of the PPP project, and therefore, represent a gap in the body of PPP management literature. Concurrently, the effective management of the differences among partners requires highly competent management skills and expertise especially in organisational settings or environments that are described as highly sophisticated and uncertain in managing multi-organisational, multi-sectoral networks and alliances such as PPPs.

2.2.4 PPP Management Expertise and Competence

It has been argued that one of the prerequisites for the successful implementation of PPP is the availability of management expertise and skills (Acar, et al., 2007). Acar et al. (2007) have noted that little empirical research has been done on what constitutes the basis for management expertise and competence in multi-organisational, multi-sectoral networks, partnerships and alliances. Also, Bach and Whitehill (2008) and Noble and Jones (2006) agreed that further research is needed to explore the requirements of the effective PPP management practices, the kind of skills, experiences, and knowhow the staff need, and learn new and different methods of managing in a cooperative inter-
sectoral relationship settings. Jones and Noble (2008) also agreed that managers “may need to change their managerial style and mindset to enable them to cope with a PPP’s unique environment” (p. 113).

The need for directing and leadership skills in managing PPPs was particularly emphasised by Hartman, Hufman and Stafford (1999), Malmborg (2003) and Brown, O’Toole, and Brudney (2004). Hartman et al. (1999), for example, adapted the concept proposed by Chrislip and Larson (1994) of collaborative leadership as a necessary ingredient for partnerships. Collaborative leaders, they argued, are those “individuals and social entities who have the credibility and entrepreneurial initiative to bring the right individuals, organisations and constituents together constructively to create vision, solve problems and reach agreements” (Hartman, et al., 1999, p. 257).

As a result, managerial techniques and skills designed for the traditional command-and-control hierarchical administration need to be modified to succeed in collaborative and networked partnership settings. As such, Acar et al. (2007) identified nine discrete categories of management competencies that are needed to effectively manage partnerships. The nine skills (9Cs) (sorted in order of importance) are: communication skills; connectivity and connective skills; collaborative attitude and skills; convening and coordinating skills; congeniality and collegiality; caring for and championing clients; coaching and consulting skills; creativity; and credibility skills (Acar, et al., 2007). To explore further these management skills, and using Edwards’ ‘competing value approach’ as an analytical framework for their study, Acar et al. (2007) agreed that this framework “posits that public and nonprofits managers, confronted by a series of competing values or demands pulling them in many directions concurrently, must play multiple roles and have multiple sets of skills” (p. 34). For the researchers, these competing values flow from two main dimensions in organisational contexts: flexibility versus control and internal versus external. The result of the interplay of these dimensions yields four distinct sets of management skills that administrators need, these being: boundary-spanning; human relations; coordinating; and directing skills. Acar and his colleagues, however, questioned the extent to which the set of skills are necessary for managing effectively in network settings and in what combinations, and, whether any other sets of skills are instrumental in the management of partnerships? To answer
these questions, it is suggested that empirical research is needed to explore the precise set of skills, values and attitudes that managers display in such settings.

Skill deficiency in managing PPPs in theory and practice, then, represents a significant gap in the current understanding and management of PPPs. In the UK, for example, a report published in September, 2008, by the Public Account Committee (Pace, et al., 2000) found that many public sector managers did not have the ‘commercial’ expertise to oversee multimillion pound projects over a long period (Read, 2008). In addressing the National Audit Office Annual Private Finance Conference in UK in July 2008, Edward Leigh (the influential chair of the Public Accounts Committee), among other speakers, raised concerns about the unavailability of the right number of staff with appropriate experience, given that private finance deals had been a feature of public sector procurement since the mid-1990s (Russel, 2008). As an indication of this issue, the UK Treasury commissioned a survey in 2008 on how well PFI contracts were being managed (Russel, 2008).

In fact, the need for unique skills and competencies to effectively manage under-organised, networked and multi-sectoral systems is an issue of great importance. However, PPP managers will not be able to effectively manage and oversee the progress of such projects unless custom-tailored and highly sophisticated management control systems are established.

### 2.2.5 PPP Performance Monitoring and Controlling Mechanisms

Maintaining control and ensuring the PPP program quality in the implementation phase is another important issue in the management of PPPs. Lister (2000) agreed that maintaining consistent monitoring and evaluation is one of the key elements to an effective PPP model (see also, Zafar Ullah, et al., 2006). Knichman and Stone (2007) also concluded that one of the success factors in implementing the ‘Cash and Counselling’ initiative was because the initiative was under the ‘radar screen’ for most of its life.

Actually, to effectively monitor the implementation of PPP programs, performance parameters should be determined and agreed upon and reporting mechanisms should be established prior to the program implementation. To do so, the entire procurement
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Process should be geared toward the identification of the issues which are “perceived as potential problems in the future” (Irvin, 1993, p. 18). To maintain control of a PPP, Irvin (1993) suggested implementing a Project Management Oversight (PMO) program which, he argued, has previously worked successfully on privatisation projects. PMO consists of independent experts in transportation, engineering and construction, and acts as an early-warning system that alerts government to problems, so that corrective measures can be promptly taken. PMO also assures that compliance with pre-established safety and quality standards are met (Irvin, 1993).

Schmeig and Climko (1998) agreed with Irvin (1993) that the PPP project outcome measures should be set prior to the project implementation. The PPP project outcome measures, Schmeig and Climko (1998) contended, are often an afterthought, when actually they should be the starting point. By agreeing on measures for the project outcomes, the partnership can come closer to understanding how performance and outcomes are really measured, and potential internal conflict issues can be identified and dealt with quickly before they cause difficulties. To do so, Grimsey and Lewis (2004a) called for establishing key reporting system, performance measures and quality standards to control performance, as well as well-structured performance monitoring system for assessing the ‘health’ of a PPP project.

In conclusion, a review of the previous research and literature on managing the implementation phase of PPPs has revealed essential gaps around managing PPPs. It is suggested that further research is required to:

- Explore the effective PPP management practices during the implementation phase;
- Explore the difficulties facing the management of a PPP during its implementation;
- Examine the presence of the institutional differences among different partnering organisations involved in a PPP arrangement, and the approaches used to manage these differences;
- Examine the types of management expertise, skills, and leadership needed to effectively manage PPPs;
- Explore the controlling and monitoring mechanisms used to ensure the effective implementation of a PPP; and,
• Obtain a detailed knowledge about managing the implementation phase of the Jordanian PPP infrastructure projects.

Accordingly, research questions have been developed based on the identified gaps in the literature and are shown in Figure 2.13.

![Figure 2.13: Gaps in research on the management of PPPs and subsequent research questions](image)

Based on the previous discussion of the PPP literature relating to managing the implementation phase of PPPs, it can be concluded that research in this area is still lacking a holistic view of the nature of the interaction and the inter-organisational relations that exist between different partners involved in a partnership relation in practice. Many aspects in the management of the implementation phase of the PPP project are still unknown and ‘black-boxed’. Hence, research on other contexts, namely inter-organisational relationships (IORs) and inter-organisational culture (IOC), has been identified as closely related to the current research from different perspectives and angles, and can provide useful insights into the PPP management and support the grounds of this research. The following provides a discussion of these two frameworks, followed by a discussion about PPPs in Jordan.

### 2.3 RESEARCH ON OTHER RELATED LITERATURE

Review of the previous research on managing PPPs during their phase of implementation revealed and identified significant gaps (e.g. ‘black-boxed’) in the body
of PPP management literature in five main aspects. Therefore, it is suggested that research into other related contexts was needed to explore these aspects. Hence, research on inter-organisational relationships (IORs) and inter-organisational culture (IOC) has been identified as closely related to the research at hand. Only the research in these fields that has been applied to PPPs is utilised in the current research. This is assumed to be useful and helpful in providing deeper insights and better understanding of the management of the partnership phenomenon in its implementation phase, and at the same time, assisting in providing more solid theoretical grounds for the current research. It is also anticipated that literature in these fields may assist in offering answers to two prime questions: (1) How do partners cooperate in practice and how do they manage their inter-organisational relationships? (2) How do partners manage their inter-organisational cultural differences (if there are any)? The following section includes a review of the relevant literature from these fields.

2.3.1 Inter-organisational Relationships (IORs)

The issue of inter-organisational relationships (IORs) between public and private sector organisations is becoming increasingly important for their survival and success (Massingham, 1994). IORs as a term has mainly been used to mean a “purposeful, collaborative and ongoing connection between two or more organisations for the pursuit of shared complementary goals” (Pearce, 2001; cited in Owen, 2005, p. 24).

The IORs have usually been addressed in the context of networks and networking theory. However, there is a considerable disagreement among researchers about the inter-relatedness between PPPs, IORs and networks. Van de Ven and Ferry (1980), for example, argued that a PPP is one type of IOR arrangements which they are described as a social system formed by members who have both collective and self-interest goals, who have interdependent processes, and can act together as independent organisation that is separate from each member’s organisation. For Golicic, Foggin and Mentzer (2003), inter-organisational relationship arrangements include partnerships, alliances, joint ventures, network organisations, franchises, license and service agreements and contractual and administered relationships. Cravens, Piercy and Shipp (1996) suggested that strategic alliances, supplier-producer collaborations, franchises, research consortia and channel of distribution linkages are all examples of the relationships that can be
established among firms in a network setting, without specifying to which one of these examples a PPP relates. Even the terms used by the networking models and PPPs are different to some extent. What is common between networks and PPPs, however, is that IORs are initiated as a result of establishing new organisational arrangement between two or more organisations, whether this arrangement is a network or mere partnership between two organisations such as the case in PPPs.

Indeed, Van de Ven and Ferry (1980) offered a more simplified classification to map the differences between different types of IORs in networked arrangements. These researchers identified three types of IORs: (1) ‘pairwise’ or ‘dyadic’, in which a relationship is established between two focal organisations (or ‘agencies’) that are equally the central focus of the activity; (2) the ‘interorganisational set’, in which relationships are established between one focal organisation and two or more member organisations; and (3) the ‘interorganisational network’, in which there is a number of organisations, none of which plays a focal role in the relationship. Using Van de Ven and Ferry’s (1980) model, a PPP arrangement can be viewed as an example of the first type of network. Specifically, PPPs demonstrate features of a dyadic network in that public and private sector partners are the two focal organisations in a partnership arrangement. Despite the difficulties that are associated with the study of PPPs in the context of networks (mentioned later in this section), as cross-referenced by the study of IORs, this study is utilising the research available in these contexts to support its grounds.

Admittedly, there is extensive research in the field of IORs and networks, however very little of this research has been applied to PPPs, either theoretically or empirically. That may be because most of the research in IORs draws from networks and networking theory, a research area described by many scholars as sophisticated and problematic which involves a high degree of complexity for different reasons (see for example, Albani & Dietz, 2009). Among these reasons is the lack of practical implementation of networks, mainly due to changes in the network structures and the difficulty to identify entities involved and modelling the network structure (Albani & Dietz, 2009). Further, although enterprise networks have been practiced for long time, they are, as a

25 Networks use terms such as: actors, players, network members, entity, agency, arenas, linkages and policy, while PPPs use terms such: partners, contract, agreement, collaboration, etc. See for example, Bueren, Klijn and Koppenjan (2003)
phenomenon, not yet well developed (Cravens, et al., 1996; Gummesson, 1994). Particularly, the general understanding of the network paradigm, definition and true content remains somewhat limited (Cravens, et al., 1996). Notably, the logic and study of networks have mostly been employed and applied in private sector organisations, and very little research has been applied in public sector organisations, or the partnership between public and private sector organisations, the subject of this study.

Yet, there are other problems associated with the study of PPPs in relation to networks that make utilising research in networks to PPPs in this study a difficult task. That is, part of the research in networks was directed towards their rationale, and therefore, answer the question of ‘why’ organisations collaborate, which is not the central focus of this study. Another part of network literature addressed the issue of network formation and therefore, answered the question of ‘how’ networks are formed, which is again not the central focus of this study (see for example, Babiak, 2009; Casey, 2008; Cravens, et al., 1996). Notwithstanding such problems, two important areas of the network literature are substantively intertwined with, and important to, the current research. The first is exploring the nature of the IORs between partners involved in a partnership arrangement, and the second is the management of these IORs. Overall, assuming that PPPs are one type of network, the main focus of this study is on how members of the network collaborate in practice during the ongoing course of their relationships, as discussed further next.

2.3.1.1 Exploring the nature of the IORs between partners

This study differentiates between ‘partnership’ (or network) development lifecycle models (discussed earlier in the thesis) and ‘relationship’ development models (IORs within partnerships or networks). In fact, exploring the nature of the IORs between partners has been addressed in the extant literature in the context of networks and PPPs within these two different (but inter-related, and sometimes, overlapped) ways. For example, in their attempts to model partnership development process, few researchers included notions about how relationships progress from one stage to another (e.g. Griffith’s (2000) partnership development model). The ‘preliminary’ network management four-stage model, developed by Keast and Hampson (2007), is another example. The ‘synthesizing stage’ of the researchers’ model involved details of building
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and maintaining relationships. Yet, the nature of IORs was also addressed within relationship development models. Indeed, the dichotomy between the two approaches is unpreventable and very difficult to establish or recognise. In this research however, exploring the nature of IORs has mainly referred to those models (or typologies) that their main focus was to describe the details of these relationships.

The study conducted by Bult-Spiering (2003), can be considered one of the few explorative research attempts that addressed the process of the interaction between public and private ‘actors’ through PPPs. By studying a number of PPP projects, Bult-Spiering (2003) aimed to explore the main characteristics of the PPP interaction and the type of relations between these characteristics. The researcher could identify two dimensions from the literature review. The first dimension was used to describe elements of a PPP (the characteristics of public and private actors and their respective interests, the networking and the PPP planned objective that has to be realised). In the second dimension, the characteristics of the IOR itself (why and how the co-operation is established) were described. Findings from a pilot case study have been used by Bult-Spiering (2008) to supplement, refine and operationalise these dimensions.

Elaborating further the process of the interaction and cooperation between two or more organisations, was a study conducted by Green and Matthias (1997), cited in Zafar Ullah et al. (2006). The study suggested that relationships between organisations form a continuum that starts with competition, progresses through cooperation to coordination and then on to collaboration and ending in control (see Figure 2.14). In the competition phase, organisations compete with each other and there are almost no functional linkages and communication between them. Cooperation, on the other hand, can be seen as a one-off relationship where organisations cooperate around certain issues or at certain times. Although they communicate with each other, they maintain almost complete autonomy. Coordination involves organisations keeping each other informed to avoid duplication of efforts. It is seen as an on-going and structured relationship between independent organisations for mutual benefit. When two or more organisations enter into a ‘joint activity’ or work closely together and share resources and have responsibility for common goals, then they are entering into collaborative relationships. Although collaboration has been given different definitions by some researchers (see for example, Albani & Dietz, 2009), the general meaning entails that it can take place at
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different stages and in different ways. It also means genuine partnership based on mutual respect and acceptance of independence of the collaborated organisations concerning their vision and approaches (Zafar Ullah, et al., 2006). Collaboration is also defined by Gray (1989) as “a process through which parties who see different aspects of a problem, can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible” (p. 5). Finally, control is “a relationship where one organisation gains control over others” (Zafar Ullah, et al., 2006, p. 144).

Exploring the relational differences in the terms of cooperation, coordination and collaboration (the ‘3Cs’) was offered by Brown and Keast (2003) as conceptual framework, derived from previous research for relationship categories that occur between organisations. According to the researchers, the cooperative relationships participants (organisation, entities, agency) establish short term, informal and voluntary relations between organisations, while each organisation remains separate and autonomous. Therefore, cooperation in this context, tends to be less strategic and entails little risk sharing. Coordination, on the other hand, occurs when certain mechanisms are used to tightly and formally link different parts of the ‘larger system’ together. It essentially requires sharing information, strategic joint planning and decision-making among partners. Finally, collaboration was seen by the researchers as a stable, long-term integration between organisations with strong linkages that are based on highest levels of trust, commitment and intense relationships. In that sense, collaboration can be seen as time-consuming and highly risky effort for organisations to work together beyond the ‘traditional methods’ of cooperative and coordinative IORs. Similar to Schaeffer and Loveridge (2002), Brown and Keast (2003) acknowledged that, while the 3Cs are
related, they are distinct in respect of the nature of relationships, degree of formalisation, risk and commitment, type of expected outcomes and organisational autonomy. Specifically, each of the 3Cs can be located on a continuum such that cooperation represents the more fragmented end, collaboration at the more integrated end and coordination occupies a position in between.

In later research, Mandell, Keast and Brown (2009), explored further the differences that exist between cooperation, coordination and collaboration (the ‘3 Cs’) as distinctive features for different network arrangements. For them, cooperation and coordination involved independent relationships between individuals (or organisations) when they come to work together to achieve a specific goal, usually with the purpose of sharing information and expertise. The collaborative relationship between participants is still interdependent in that participants are aware of the importance and the benefits of working together, however, this type of relationship goes beyond this interdependence to being fully committed to the relationship and changing the way they operate to achieve ‘strategic synergies’ between them and find innovative solutions to their problems.

Although the essence of the 3Cs’ integration continuum suggested by Brown and Keast (2003) and Mandell, Keast and Brown (2009) is similar to ‘the inter-organisational relationships continuum’ that was offered by Green and Matthias (1997), it has offered further insights into understanding the analytical distinction between these three types of relations and the horizontal and vertical linkages between organisations based on this differentiation. Further, it has the potential to unify the usage of these concepts among different scholars in the field of partnered, networked and IOR arrangements, to assist in their optimal application for better ‘inter-agency working’ (Brown & Keast, 2003; Mandell, et al., 2009).

Similar research was also done by Pan, Sparks and Fulop (2007) to investigate the development of business-to-business (B2B) partner relationships in the Sino-Australian travel trade context. The study offered a more ‘linear’, process-related typology of the development of B2B inter-organisational relations than the one suggested by Green and Mathis (1997) or Brown and Keast (2003), by viewing these relationships as a progressive process. The researchers concluded that B2B relationships are developed
through a three-phase process. This process starts with a measuring-up phase (e.g. parties getting to know each other), and then develops into a testing phase (e.g. characterised by word-of-mouth, negotiating and face-to-face interaction), followed by a commitment phase (through a ‘running-in process’ that entails the need for adaptation) and ‘tacit understanding’ (for good relationships between counterparts as precursors to a well-established relationship).

Similarly, the process that IORs progress through was further researched by Keast and Hampson (2007). The researchers developed a preliminary framework that was derived from previous research and involved four network strategies and tasks. The strategies and tasks suggested by the researchers described how IORs are created and developed as a process. This four-stage process included: activating (forming membership and accessing resources); framing (shifting from single to collective orientation); mobilising (securing commitment to whole or collective identity); and, synthesising (building and maintaining relationships).

Finally, cooperation, as one of the important theoretical constructs in ‘voluntary’ IOR arrangements, was further analysed by Schaeffer and Loveridge (2002). The researchers specified four different forms for ‘sustained cooperative efforts’ between partnering organisations according to their degree of formality in relationships and their benefits to the partners. The ‘intersectoral’ type of cooperation (or the leader-follower relationships) is an example of the informal cooperative efforts that arise as a result of trial and error experience between participants. This form of cooperation is most likely to occur in situations where one participant has significantly more resources or power than the other. On the other end, the ‘exchange relationship’ (or a buyer-seller relationship) is an example of the formal cooperative relationships that involves voluntary partners’ exchanges in which both are better off afterwards. This form of cooperative relationships requires an open-ended agreement between partners to work together. Concerning their benefits, cooperative partnerships were categorised as ‘full’ and ‘limited partnerships’. Full partnership is achieved when risks and rewards are shared and decisions are made jointly. Limited partnership, in contrast, means that risks and rewards are not shared equally, that is, when one partner agrees only to a certain amount of liability while the other backs the endeavour with full faith and credit (p. 172 & p. 180).
2.3.1.2 Inter-organisational relationship management

It is important to explore the nature of IORs between partners to assist PPP managers to adopt more effective IOR management approaches. However, although important, managing the relationships between two organisations involved in a PPP arrangement has yielded very little attention by researchers and practitioners in the field of IORs or PPPs. Further, very little is known about assessing these kinds of relationships. In addition, very little research on managing IORs is specific to PPPs (Bach & Whitehill, 2008). Furthermore, many researchers reported several difficulties in finding a concrete and reliable effectiveness measurement framework to assess the outcomes of the relationships (e.g. cooperation) between and among partners, its organisational consequences or the partnership itself (as a network arrangement as a whole) (see for example, Babiak, 2009; Pearce, 2001). That is partially because relationships vary significantly from those governed by markets (which generally resemble the private sector organisation) or hierarchies (which generally resemble the public sector organisation), and pose very different issues for researchers and managers (Ring & Van de Ven, 1992; See also, Klijn and Teisman, 2000). Furthermore, because of the complexity of network arrangements, their unique qualities and complex structures with multiple layers of interaction, and the shifting emphases of network tasks and actions, all require different/additional effectiveness evolution tools and measures than those of traditional organisational settings (Mandell & Keast, 2008). As such, the relationship management in networks arrangements “requires management strategies and techniques that may not be synonymous with conventional approaches” (Keast & Hampson, 2007, p. 364). Additionally, despite the increased attention on partnership formation and management, the outcomes of partnership relationships have rarely been empirically examined. That may be because of the difficulties associated with identifying and assessing multiple and diverse interests involved (Babiak, 2009). That is why Fischbacher and Beaumont (2003) suggested that far greater understanding is needed about creating, implementing and maintaining effective intra- and inter-organisational relationships. They stressed the importance of academic scrutiny of the PPP relationships to help provide a more substantive, holistic evidence base for future policy development.
All the same, the study conducted by Keast and Hampson (2007) was one of the few attempts to provide in-depth insights into the relationship-based management strategies that partners adopted to manage their IORs. Drawing on the Cooperative Research Centre for Construction and Innovation (CRC CI) in Australia as a case study, Keast and Hampson (2007) concluded that network relational management remained critical function to achieve the goals of the CRC CI program. It was necessary for the members involved in the network to go beyond those already established limited authorities and contractual relational processes to nurture and enhance their interpersonal relationships. Moreover, it was demonstrated that although IOR (e.g. in innovation networks) were based on an underpinning relationship principle, they could draw on a mix of arrangements to create the necessary context for these relationships to be leveraged into productive outcomes. Therefore, the researchers suggested that relationships must be strategically managed to secure optimal outcomes that can be reaped from a network arrangement.

The lessons learned from the ‘successful’ partnership relationships between the Federal Bureau of Prisons (BOP) and the Media Advisory Group in the United States in 2001 in regards to the issue of carrying out a death sentence to McVeigh for his role in the 1995 bombing of the Murrah Federal Building in Oklahoma city were that partners: (1) should establish clear and attainable goals; (2) assess the benefits, obstacles and risks of the partnership; (3) develop a partnership strategy; (4) establish trust; and, (5) be flexible to the changing situations (Smith & Roberts, 2003). The researchers added that there has to be mutual gain for each partner involved in an inter-organisational relationship arrangement.

To explore further the issue of managing the cooperative interaction between partners, Schaeffer & Loveridge (2002) identified three dimensions that influence the form of cooperation effort between partners. These included: the compatibility of goals which represents the correlation between organisational culture and the expected rewards of the participants; coordination between participants in decision making; and, the commitment of resources that involves human, financial and social capital. The

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26 In the sense that it met the needs of both the BOP and the media, as the partnership between them "demonstrated mutual respect and reaped dividends [for them and] the public who followed the story" (Smith & Roberts, 2003, p. 523).
researchers offered a model that shows the influence of various dimensions of the cooperative efforts on forms of cooperation (Figure 2.15).

![Diagram of Dimensions influencing the forms of cooperation: goals, coordination and resources]

Source: Schaeffer and Loveridge (2002)

Figure 2.15: Dimensions influencing the forms of cooperation: goals, coordination and resources

To summarise, the consideration of inter-organisational relationships was addressed in the extant literature in the context of the study of networks and hybridised organisational arrangements. A review of previous research on the IORs that was particularly and directly related to PPPs (and networked dyadic-type IORs) revealed that core constructs deployed and/or drawn on in theorising about this area of research included: the nature of the relationships between partners in the partnership development processes; and, the management of these relationships. Further, using Van de Ven and Ferry’s (1980) typology, the cases studied in this research can be considered one form of dyadic network settings, in that the organisations involved in the partnership are the focal of the central focus of activity (see Figures 3.2 and 3.3).

In conclusion, PPP literature has been restricted to providing an explanation for the rise in PPPs popularity with governments, the focus on the material and economic considerations and ex ante contractual issues, suggesting ways to involve stakeholders in the development of a PPP project, discussing its outcomes from a macro-level perspective (Weihi, 2008), and to the processes of partnership development. Very little of the literature provided insights into the nature of IORs during the ongoing managerial life of a PPP (e.g. from a micro-level perspective) and on how these relationships are managed, particularly during the implementation phase of the partnership lifecycle. More specifically, Weihe (2008) called for the need to further research certain ‘black-boxed’ areas such as: how does interaction between partners take place in practice? What is the pattern and frequency, content of this interaction?
A review of the previous research and literature on IORs has revealed essential research gaps. It is suggested that further research is required to explore and understand the inter-organisational relationship environment in managing PPPs to specifically:

- Explore the process and the content, context and nature of IORs between partners involved in a PPP project;
- Gain insights into the management of IORs and the ongoing managerial life of a PPP from a micro-level perspective.

Accordingly, research questions have been developed based on the identified gaps in the literature and are shown in Figure 2.16.

**Figure 2.16: Gaps in research on IORs and subsequent research questions**

2.3.2 **Inter-Organisational Culture (IOC)**

Organisational culture refers to collectively held beliefs, assumptions, symbols, rituals, taken for granted values and practices which give meaning to acceptable behaviour, and is associated with the critical aspects of an organisation’s mission, goals and values and informs the nature of templates, routines and practices that an organisation develops to achieve its goals (Baumann, 2008; Cameron & Quinn, 1999; Twati, 2006). It also, directly and indirectly, reflects the way organisations define their interests, priorities and the way they identify and solve problems (Baumann, 2008).

The impact of organisational culture on management processes and the way work is done is widely recognised among scholars. It has been argued that one of the most reported causes for the failure of mergers and acquisitions is neglecting the effect of
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Coopers and Lybrand (1996), cited in Twati, 2006) for example, found that the majority of the mergers studied (83%) failed to make any recovery in shareholder value due to differences in organisational culture. Knickman and Stone (2007) also found that similarity in culture of the public/private partners was among a number of factors contributing to the ability to meet their partnership challenges. Any loss in the partners’ mutual understanding is likely to hinder the PPP progress in many ways. An example is the decision making process and the delays that might hamper progress (Huxham & Vangen, 2000, see also; Knickman & Stone, 2007).

In the current research, there are differences between three different levels or layers of culture. The levels of culture are: societal or national culture; corporate or organisational culture; and, ‘inter-corporate’ or ‘inter-organisational culture’. Although culture can generally be viewed as a reflection of a collective mix of individual employee culture working in an organisational setting, the current researcher contends that inter-corporate or inter-organisational culture is a different form of culture. This type of culture is defined by the current research as: “the collectively held beliefs, assumptions, symbols, routines, rituals, values and the acceptable behaviours and practices which are developed as a result of the dynamics and interaction of two or more organisations working together in joint partnership settings to achieve their shared goals”. Notably, very little research has been found on the dynamics and interaction of two or more different organisational cultures (e.g. inter-corporate, inter-organisational culture) when they come to work together jointly in partnership relations. Even cultural theorists, like Hofstede (2001) and Triandis (2002), have mainly focused on providing descriptions of national cultural values (Hutchings & Weir, 2006). In addition, very little research in this vital area has been specifically applied in the field of PPPs.

Many scholars (e.g. Bach & Whitehill, 2008; Baumann, 2008; Huxham & Vangen, 2000; Jacobs, 1992; Johnston & Gudergan, 2007; Klijn & Teisman, 2003; Knickman & Stone, 2007; Malmborg, 2003; Mann, Pier & Yasin, 2007; Sabjanyi, 2006; Teisman & Klijn, 2002; Vining & Boardam, 2008; Weihe, 2008) have agreed that partnering organisations have different organisational cultures and/or different values. Yet, very few have questioned the degree of cultural compatibility among different partnering organisations and the type of culture that fits two or more organisations when partnering. As such, the current research assumes that ‘inter-organisational culture’ is an
emerging form of culture, and therefore, needs scholarly attention and further research. Bach and Whitehill (2008), for example, confirmed that when two organisations want to establish a joint venture (i.e. a form of PPP arrangement), awareness should be raised of the kind of cultures that have to match, in order to “get incompatible cultures compatible” (p. 119). They called for further research on the dynamics of cross-sector joint ventures and raised questions about the nature and type of a successful plan of the cultural integration in the assembly of a cross-sector joint venture.

The issue of cultural differences among partners involved in a PPP project, particularly the problem of managing language and culture, was addressed by Huxham and Vangen (2000). They argued that there are “some obvious stereotypical differences between the commercial language and cultural norms and values of business compared with socially oriented language and associated cultural norms and values of public service organisations” (p. 296). Significant misunderstandings can happen due to differences in language and the culture embedded in it. Tierney et al. (2010) also confirmed the presence of the cultural differences that result in miscommunication and misunderstanding among partners. An example of these differences is in their different expectations (e.g. over the privacy issues for health care information that may vary greatly between cultures). Such differences, as argued by the researchers, can become “major impediments to transnational collaboration especially among inexperienced partners” (p. 271). Nevertheless, to help prevent or minimise such differences, Tierney et al. (2010) suggested establishing mentoring relationships between the more experienced partners and those who are less experienced.

By the same token, Noble and Jones (2006) agreed that ‘cultural distance’ can exist between the key individual players from the partner organisations that can be described “as a deep and abiding cultural divide [which leads partners to] exhibit different values, concerns and accountabilities, pursue different objectives and place different aspects of risk and benefits” (p. 901). Similarly, Bach and Whitehill (2008) found that a “cultural gap existed between the parent companies [in joint ventures] which reflected the different cultural characteristics between the profit and non-profit sectors” (p. 123). Johnston and Gudergan (2007) also confirmed that “PPP brings together at least two distinctly different subcultures and operating logics into a PPP organisational form that is project-based” (p. 572). It is important that both public and private participants must
have a common view of the challenges confronting partnerships and must refer to the same thing in the collaboration process. However, Malmborg (2003) suspected that this is the case in practice.

The difference in the power relationships between partners is another example of cultural differences between them. This is especially evident when the concerns arise about which party should take the lead. Some partners often express their “extreme frustrations over feelings of disempowerment when working with large public agencies” (Huxham & Vangen, 2000, p. 298). In this regard, Schaeffer and Loveridge (2002) seemed to agree with Huxham and Vangen (2000) on the differences that exist between partners in terms of power and capabilities. In most situations, it is difficult to perceive public and private partners as equals, and that “[they] often fall into the trap of being co-opted or feeling loss of authority as the PPC [Public Private Cooperation] develops, signalling a need to renegotiate or end the PPC” (Schaeffer & Loveridge, 2002, p. 185). Huxham and Vangen (2000) related the issue of inequality of power to the trust that can be established and experienced between partners. They contended that many authors write about trust as precondition for successful collaboration where partners do not have history of “previous relationships that have not engendered trust; and how trust can be built and maintained in situations where the power relationships are perceived to be uneven” (p. 299) or unequal.

Schaeffer and Loveridge (2002) elaborated further on the differences that exist between public and private sectors in terms of the power and pointed to confidentiality issues and their impact on cooperation between the two partners. In terms of the power differences, the researchers argued that “unlike the private sector, which relies on persuasion, the public sector can force compliance with its plans” (p. 174), and enjoy the legitimacy that comes from the support they get from their citizens. The ‘lack’ of confidentiality in the public sector27 may keep the private partners sceptical to cooperate as they fear that this cooperation may help in disclosing confidential information available to their competitors.

Differences that exist between partners’ value systems seem to be a primary concern for many scholars. Some researchers even went so far as to claim that the division between

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27 Schaeffer and Loveridge (2002) explained that public sector decisions “are usually discussed in an open forum and subject to intense scrutiny by the press, interest groups, and private citizens” (p. 174).
public and private domains is impossible to solve, due to the differences in value patterns among partners (e.g. Jacobs, 1992). Most importantly, these differences may result in different strategies, agendas and processes being followed by each partner, and therefore, could have substantial consequences for the overall performance and outcomes of a PPP project. Klijn and Teisman (2003), for example, using the network logic in analysing three PPPs engaged in infrastructure projects in the Netherlands, concluded that partners had difficulty with joint-decision making and organisation when confronted with network governance problems. Such problems mainly result in further problems in institutional roles and strategic behaviour. The researchers concluded that the difficulty in changing role conceptions and domain demarcations between public and private sectors stems from the assumption that they are two different ethical systems with different moral syndromes: the public sector is the guardian syndrome while the private sector is the commercial one. In this regard, Klijn and Teisman (2003) stated:

“.. Here we touch upon one of the core issues of PPP, which is that the values of public bodies will result in strategies aimed at controlling the substance of projects and minimizing the financial risks .. in such cases, political accountability is without mercy. [In contrast], private enterprises are judged by results and, for them, it is the market mechanism that is without mercy” (p. 144).

Values and cultural gaps between partners in the PPP process may be explained in most cases as a stereotyping phenomenon due to the inexperience of partners working together. Malmborg (2003) for example, found that private actors have a common understanding that “local and regional authorities are not trustworthy” (p. 144). They were acting as ‘supervisors’ and were not fully devoted to the project as they were involved in double, and sometimes triple roles (e.g. involved in multiple roles and other duties and work commitments).

As regards the importance and the impact of cultural compatibility and integration in assembling joint ventures, a number of researchers agreed on the importance of this cross-sector cultural integration and called for more research into this important area as

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28 According to Klijn and Teisman (2003, p. 143) typical guardian syndrome values include avoiding trade and commerce, striving for discipline and loyalty and respecting traditions and hierarchy, whereas typical commercial syndrome values include avoiding violence, achieving agreements on voluntary basis, honesty and competitiveness.
it was rarely considered in research (e.g. Baumann, 2008; Chao, 2005; Lodorfos & Boateng, 2006; London, et al., 2005; Rundall, 2000). Bach and Whitehill (2008), particularly, found that, “a successful joint venture needs two organisations which assemble similar core values, and complementary and non-competitive resources” (p. 124). They raised a very important research question, that is: What could a successful plan of cultural integration in the assembly of a cross-sector joint venture look like? Other researchers, emphasised that obstacles in partnering arrangements depended more on cultural aspects than on technological ones (e.g. Baumann, 2008; Manchester, 1997). Such challenges and concerns that could sabotage partnerships include corporate culture clashes, employee turf protection and some employees’ resistance to new ideas (Schriener, 1991).

Assembling and establishing similar value systems and shared culture amongst partnering organisations is very difficult to achieve. Fox and Butler (2004) confirmed this difficulty and argued that managing cultural differences requires a leader with ‘cultural intelligence’ background. For them, cultural intelligence means “the ability to identify the cultures within different organisations and then construct an appropriate response to them” (p. 42). Therefore, to better understand the type of culture that exists in different organisations, Fox and Butler (2004) have offered their view in a model (see Figure 2.17) that typifies and characterises different organisational cultures. The researchers’ view was based on their experience in a range of public, private and voluntary sector partnership organisations. It was also ‘loosely’ based on Goffee and Jones’ (1996) categorisation of organisational cultures. That is by considering two dimensions: sociability (a measure of friendliness) and solidarity (a measure of achievement).

In fact, Fox and Butler’s (2004) typology is very similar to the managerial grid that was developed by Blake and Mouton in the 1960s to conceptualise leadership styles based on the two behavioural dimensions: concern for people and concern for production (Blake & Mouton, 1984). Blake and Mouton’s grid was originally developed as a result of an effort to link leadership style to effective performance.
The Networked Culture
Is one based on friendship and kindness where people genuinely like and trust each other. The culture is conversational with people discussing a range of work and non-work topics secure in the knowledge that they will be able to ‘have their say’.

The Communal Culture
Combines friendship with drive and ambition that leads to a passion for the organisation and its products and a strong sense of community. The culture is one of working and playing hard is highly infectious.

The Fragmented Culture
Is one in which people are not particularly friendly toward each other and do not support the organisation and its goals. They work primarily for themselves and tend to favour working in isolation, in offices, at home, on the road rather than open plan environment. Communication is work related, brief with few meetings take place.

The Mercenary Culture
Is based on a drive to get things done. People focus on goals and the time between developing and implementing ideas is short, meaning that communication is short and to the point. The culture is restless and ruthless and value is placed on reacting quickly.

Source: Adapted from Fox and Butler (2004)

Figure 2.17: A typology of different organisational cultures

In another attempt to categorise the forms of organisational cultures, Sabjanyi (2006) typified culture based on two core dimensions: the compliant-challenging and the competitive-collaborative. The outcome of the interplay between these dimensions was four organisational culture types. These were: compliant, collaborative, challenging and competitive. Using and adapting Sabjanyi’s (2006) typology (shown in Figure 2.18), Bach and Whitehill (2008) however, found differences between profit and non-profit organisation cultures. In contrast to the organisational culture of the profit organisation, the culture of the non-profit organisation was characterised by its members being very cooperative, participative, and teamwork oriented. The question that can be raised here is where would/should the type of the PPP organisation’s culture be placed on Fox and Butler and Bach and Whitehill’s (2008) typologies? Would these, or any other typologies, be valid to characterise the nature of the IOC that is dominant in partnership organisations in reality?
To conclude, the nature of the cultural interaction and compatibility among different partners involved in a PPP project is of primary interest to the current research, particularly the form of ‘inter-organisational culture’, which is assumed to emerge in conditions where two or more organisations are involved in a PPP arrangement. Exploring this form of organisational culture, will hopefully contribute to its development in future research. Additionally, it can be noted that core constructs deployed and/or drawn on in theorising about ‘inter-organisational culture’ include: culture typology, the degree of the cultural compatibility among different partnering organisations, cultural integration in a cross-sector partnerships and managing the incompatible cultural aspects or the cultural differences among different partners involved in a PPP arrangement.

A review of the previous research and literature on IOC has revealed key gaps. It is suggested that further research is required to understand and explore inter-organisational culture in the management of PPPs to:

- Examine the degree of cultural compatibility and integration between partnering organisations;
- Examine the approaches that partner managers adopt to manage potential incompatible cultural aspects; and,
• Explore the type of organisational culture in hybridised, inter-sectoral or multi-relational settings.

Accordingly, research questions have been developed based on the identified gaps in the literature and are shown in Figure 2.19.

![Figure 2.19: Gaps in research on IOC and subsequent research questions](image)

As the current research is conducted in Jordan, the following section provides an overview of PPP status and the challenges facing partnerships in that country.

### 2.3.3 PPPs in MENA Countries and in Jordan

#### 2.3.3.1 PPPs in MENA Countries

Arguably, and generally speaking, Middle East and North African countries (MENA) share similar social, cultural and managerial backgrounds. Arabic is the official language in each of these countries and all have in common, economic, cultural and social development objectives and challenges. They strive to create modern infrastructure to support development and compete in global markets. In effect, infrastructure needs in MENA’s region are large. It is estimated that MENA (oil and non-oil countries) will need to invest US$ 40-50 billion a year on infrastructure projects alone (Al-Nasa’a, 2007). There is a large opportunity for MENA oil-producing countries for huge infrastructure investments due to rising oil prices and large budget surpluses (Al-Nasa’a, 2007). Likewise, non-oil MENA economies are unlikely to be able to finance their infrastructure needs out of their budgets. To do so, they are

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29 Yet, indeed, considerable economic and cultural differences exist among MENA countries.
increasingly turning to the private sector to build, maintain and operate a wide variety of facilities under long-term contracts. Eventually, using PPP arrangements to produce and/or deliver a public product or service in MENA has the advantage over other options of delivery such as privatisation for example, which “often faces harsher public resistance. The permanent transfer of asset ownership from the public to the private sector is seen as losing ownership and control over national assists and the services they provide” (Al-Nasa’a, 2007, p. 3).

PPPs in MENA countries, however, need a well-established institutional and framework, as little effort has been initiated in this regard in most MENA countries. On the implementation side of the project management, Al-Nasa’a (2007) suggested to set up dedicated project management units either within the relevant line ministries and/or the central PPP unit to undertake and oversee the PPP process. He noted that, until 2007, only one country (Egypt) has established a well-developed PPP unit within the Ministry of Finance structure. Whereas, in the rest of MENA countries, a dedicated PPP unit is either partially developed (e.g. Jordan, Morocco, Saudi Arabia, UAE) or does not even existed yet (e.g. Algeria, Lebanon, Oman and Syria). Legally, with the exception of Egypt, Jordan and Morocco, the remaining MENA countries have not yet developed a fully PPP legal framework. Almost equally, all countries of MENA do not yet have a well developed policy framework to demonstrate the governments’ commitment to PPPs (Al-Nasa’a, 2007).

2.3.3.2 **PPPs in Jordan**

Strategically, PPPs in Jordan are considered as a key component of the country’s economic development strategy (El-Khatib, 2008). However, only recently PPPs were introduced to the Jordanian market. The first PPP project entered into the implementation stage in mid-2003 was the Jordan Education Initiative (JEI). Therefore, the PPP market in the country lacks experience. Institutionally, the legal and institutional frameworks have existed only since 2007, when the PPP policy was enacted.
PPP institutional framework in Jordan

The legal and institutional frameworks for PPPs had not existed before 2000, when the Privatisation Law was enacted and included some reference to PPPs. In mid 2005, a PPP strategy was drafted and highlighted the expected benefits to the country, making use of the best international practices in PPP experience. In 2006, the Executive Privatisation Commission (EPC) was assigned the primary role of establishing the required legal and institutional frameworks for PPPs (Jordan Executive Privatisation Commission-EPC, 2010). EPC, in cooperation with other stakeholders, prepared the PPP policy paper which was endorsed in mid 2007 (El-Khatib, 2008). The privatisation framework of what is known as Regulation for Implementing Privatisation Transactions (Regulation number 80 of 2008), which was drafted in 2008, included clauses detailing the implementation of PPPs. The privatisation framework which was only drafted in 2008 and the Privatisation Law still provide the legal framework for PPPs in Jordan. As such, the legal and institutional frameworks for PPPs in Jordan are still not yet well-developed and can be described as fragmented and immature.

As part of the economic reform measures to mobilise private investments, Jordan launched its PPP Program in 2008, and assigned its implementation to the Executive Privatisation Commission (EPC) as the central agency tasked with the implementation of privatisation and PPP programmes in Jordan. In doing so, EPC supports various public sector entities, private entrepreneurs, investors and stakeholders in identifying the potential investment opportunities and implementing privatisation and PPP projects. In cooperation with relevant ministries, EPC prepares a pipeline of potential PPP projects in different infrastructure sectors, assessing and prioritising their economic and social feasibility, their viability and contribution to the economic and social development of the country. EPC also disseminates information about the latest PPP projects, trends and experience. Hence, the main challenge that EPC is currently facing is to maintain the country’s success in privatisation, build on it and invigorate the flow of foreign direct investment to the economy through PPPs (Jordan Executive Privatisation Commission-EPC, 2010).

The 2008 Privatisation Regulation mandates that a Commission, a Steering Committee and a Technical Committee should be formed to oversee the application of privatisation
(and PPP) transactions. The Regulation details the roles for each in the privatisation transaction process. The Commission prepares studies and reports on privatisation transaction, takes the required measures to contract with a Consultant independent of the Commission and coordinate with the concerned entities to execute privatisation transactions and reports to the Privatisation Council which, in turn, reports to the Council of Ministers (Article 3 of the Regulation). The Steering Committee, on the other hand, was formed to manage complaints submitted from any concerned entity and to manage the detailed bidding process (Article 4 of the Regulation). It comprises seven members appointed by virtue of a decision of the Council of Ministers. The Steering committee appoints a chairperson and members of the Technical Committee and supervises its performance and reports to the Commission. The Technical Committee prepares documents necessary to implement the Pre-Qualification phase and reports to the Steering Committee any matters in relation to the technical aspects of the bidding transaction (Article 7 of the Regulation).

According to the 2008 Privatisation Regulation, and with respect to the implementation of PPPs in particular, studies should be conducted to investigate the impact of the proposed project on social, economic and environmental aspects. Studies should detail the following (Article 8 of the Regulation) (EPC, 2008):

1. Preliminary analysis of the project’s investment risks and funding, managerial and technical expertise required;
2. Financial pre-feasibility study of the project using financial indicators;
3. The project’s comparative cost analysis in case of using a PPP with the cost of its implementation by the public sector;
4. The legal requirements of the project;
5. The economic justification for government support, if needed; and,
6. The conditions that are to be met by the investors.

Furthermore, the Regulation specifies the details of the PPP contract and the rights and obligations of parties involved in it (Article 13c), as follows (EPC, 2008):

1. The purpose of the partnership and the work/service specifications;
2. A mechanism to supervise the provision of the service or the work;
3. Reliable indicators to ensure the quality of the implementation;
4. The financial obligations of each party;
5. A financing mechanism for the partnership transaction;
6. The allocation of risk;
7. The tariffs payable by the beneficiary of the service or work, the tariff adjustment and collection mechanism;
8. The requirements to relinquish ownership of the project, if required; and,
9. Any other item.

Jordan’s experience in PPPs

On the application side, and perhaps surprisingly, the GoJ is going ahead rapidly with using PPP arrangements and initiatives in both infrastructure and services sectors, while the institutional and the legal framework for PPPs in the country is still developing. Since the year 2000, GoJ has announced more than 35 initiatives that use two or more PPP forms and arrangements. Jordan expects overall infrastructure spending averages to be around $US 750 million to $US 1.1 billion a year through to 2015 (El-Khatib, 2008). Different types of projects are identified by EPC as targeted for implementation. These include: energy, transport, municipal services, education, health, tourism and water sanitation, recycling and management. One of the biggest ever investment in Jordan will be the Red Sea Canal (RSC) project, using a PPP arrangement that could cost as much as US$ 3 billion to complete. The planned project, which will connect the Red Sea (south) to the Dead Sea (north) is a vital plan for the whole region and will enable Jordan to produce hydroelectric power and satisfy its water requirement needs (Platt, 2007). It is worth mentioning that Jordan hosted the Second Annual PPP Middle East and North Africa Summit held in Amman on 22nd June 2008 which indicated the importance of PPPs to Jordan.

Using the PPP market maturity curve mentioned by Siemiatycki (2010), Jordan’s experience in PPPs, as compared to its own economy, can be rated moderately high in activity and low in institutional and legal framework sophistication (see Figure 2.20). According to Siemiatycki (2010), the PPP market in the UK is the most active worldwide. It has the most developed and sophisticated institutional, legal, regulatory and business structure to support the implementation of PPPs.
The following are examples of PPP projects in Jordan and a brief summary of each, concluded by a summary of these projects in Table 2.7.

Samra Waste Water Treatment Plant (SWTTP)

This project involves the design, construction, procurement operation, maintenance and financing of a new wastewater treatment plant under a 25-year, BOT (Build, Operate and Transfer) contract. The SWWTP is the first project to use the BOT model of PPPs in Jordan. It is also the first wastewater treatment facility in the Middle East to have used a combination of private, local government and donor financing. The total budget for the project is US$169 million. The construction process for this project started in 2004 and successfully completed in 2008. The facility is now treating 267,000 cubic meters of wastewater per day and serving two million Jordanians.
The Jordan Education Initiative (JEI)

The JEI aimed to improve the development and delivery of education to Jordan’s citizen as a catalyst for social and economic development, acceleration of the educational reforms, assisting to build the capacity of the local information technology industry and to build a PPP form that can be exported to and replicated in other countries (WEF, 2004; GoJ & WEF, 2004). The JEI targeted five main tracks for educational development: in-classroom technology, e-curricula, training, ICT industry development and lifelong learning. With a budget of US$ 22 million, this initiative has brought together more than 44 global and local organisations from the private, public and non-governmental organisations (NGOs). It was established in early 2003, developed in the middle of the same year and implemented in 2004.

JEI was planned for a further expansion stage to roll out in all public schools in the country, but was deferred\(^{30}\), as it had faced difficulties in the application side, mostly due to it being more of an idealistic initiative than a realistic one to apply in practice. This was obviously evident in its first objective which stated that the initiative aims to “improve the development and delivery of education to Jordan’s citizens [though students were targeted] through public-private partnerships, and .. help the government of Jordan achieve its vision for education as a catalyst for social and economic development”, and also “to serve as an example to replicate in other countries in the region” (GoJ & WEF, 2004). In this regard, Yin (1993) suggested that only after the maturity stage, partnerships can have the prospects to push the broader agenda of the PPP and grow further to become an institutionalised unit of governance, which obviously the JEI could not reach.

Furthermore, the JEI has shown that those tracks of a technical nature (i.e. designing and developing new e-curricula and training staff) have been more successful than those which had ‘intangible’ processes and outcomes (i.e. the ICT industry development and lifelong learning) (see also, McKinsey & Company, 2005).

\(^{30}\) Because of these circumstances surrounding the JEI, as well as access difficulties, it was not possible to consider it as a suitable case study for this research. This is further detailed in Chapter 3.
Expansion of Queen Alia International Airport (QAIA)

This project involves the operation, maintenance, expansion, rehabilitation and modernisation of the existing QAIA using BOT form of PPPs. The project is budgeted for US$ 750 million with a concession period of 25 years. The construction of the new terminal is being carried out in two phases. The first, which was started in 2007 and is expected to be completed by the first quarter of 2011, involves expansion works to provide for a total capacity of up to 9 million annual passengers. The second phase will involve works to provide for a capacity of up to 12 million annual passengers. QAIA faced some delays in construction of Phase 1 due to expansion issues that required more funding.

Disi Amman Water Conveyor (DAWC)

The project is to finance a bulk water extraction and conveyance system to supply Amman, the capital city, with 100 million cubic meters per year of potable drinking water. Thus, the Disi conveyance system is designed to serve the long term water delivery needs of Jordan. It involves the extraction of water from the Disi Aquifer and conveyance of the water through a 325 km pipeline to two reservoirs. This project has a cost estimated at approximately US$ 875 million, through a 25-year contract on a BOT basis (International Finance Company-IFC, 2008).

Because the Disi Aquifer has a finite life span, the project is part of the GOJ’s larger regional framework of water management and development of new resources, which eventually will include the desalination of seawater from the Red Sea in the South. The tentative timetable for the completion of the project construction was 3.5 years (Water Authority of Jordan, 2009). The construction process started in 2008 and was suspended in 2009 due to economic feasibility of the project that was escalated later to a political debate reflecting relations with the neighbouring countries, particularly Saudi Arabia and the involvement of Israel in the project.

Medical and Industrial Waste Treatment Plant (MIWTP)

This project was executed using the Build, Own, Operate and Transfer (BOOT) model of PPPs. This project involved a long term process of negotiations and preparations
since the date a decision was taken by the Council of Ministers in mid 2003 to start up the project until the end of 2009 when it was awarded to the contracting company (Nasser Group Consortium).

**Municipal Solid Waste Collection and Recycling (MSWCR)**

This project aimed at engaging the private sector in municipal solid waste collection, transport and recycling in the capital city of Amman. The project was planned to be executed utilising the BOT scheme that requires the investor to finance, operate and maintain the vehicle and equipment of the overall project. A decision was endorsed in 2007 to proceed with the project. However, a decision was taken in 2008 to postpone the tendering process to allow for further thorough revision, modification to the design and development of a long-term comprehensive strategy for private sector participation in municipal solid waste management (Jordan Executive Privatisation Commission-EPC, 2010).

**Amman-Zarqa Light Railway (AZR)**

A 20-km in length railway system with an estimated cost of $US 335 million was planned to connect Amman, the capital city, to Zarqa, the second largest city in population terms in Jordan, to meet the continuous increase in demand for transportation between the two cities. The project feasibility studies started in mid 2004. The government of Jordan decided to execute the project using the BOT form of partnership and was anticipated to assume the cost of land acquisition for the project. The tendering process started the year after, and could only yield an offer from only one bidder (Mena Rail Consortium, Egypt). The offer was declined as it has been conditional a large government subsidy. The project was re-tendered in 2006, with an amendment including more financial participation by the government in the project equivalent to US$ 85 million, through equal payment over three years. This time, three offers were received in 2007. The infrastructure Development Corporation (IDC; Pakistan) was announced to be the preferred bidder, and the contract agreement was signed the same year. IDC was unable to conclude the financial closure on the due date (March 23rd 2008). Accordingly, the agreement was officially annulled by the government and the bid bond was liquidated.
The GoJ, then started a new round of negotiations with the second bidder (Flex Resorts and Real-Estate Consortium, called Aknan Global; Kuwait. The construction and operation and the land lease agreements were signed in mid 2008, but the investor was not able to qualify for the project by the designated date (March 31st 2009), and therefore, the agreement was deserted and the GoJ is currently exploring other avenues to proceed with the project.

**Amman Ring Toll-Road (ART)**

The 118km ART, when completed is expected to raise the standard of road transport and increase the availability of road transport links in the country. Using the traditional procurement approach to construct the first phase of the project by the government, the remaining two phases are planned to be constructed, operated and maintained on a BOT basis. The first phase is currently under construction and was expected to be completed in 2011. The GoJ has finalised the required studies for the project and is currently preparing for the tendering process. ART is the first project in the country to use both a traditional procurement approach for one part of the project and a PPP arrangement for the remaining parts.

**Jordan Rail System (JRS)**

This project, which involves partnership with the private sector using the BOT model, is planned to establish an integrated rail system connecting Jordan with its neighbouring countries. In addition, the project is expected to curb the embodiments and delays to phosphate transfer to the Port of Aqaba in southern Jordan. GoJ is expected to provide financial support to the project’s infrastructure requirements. The JRS had been approved by the Council of Ministers in 2008 and a consultancy firm (PNB Pari) was announced as a preferred bidder in 2009. Phase 1 of the project is expected to start in mid 2012.

As shown in Table 2.7, the introduction of PPPs to the Jordanian market is as recent as 2003 and most are either in the stage of development or construction. Also, the BOT model of PPPs is the most preferred form of partnership in Jordan. Only one project was
planned to use the BOOT form of partnership, and required a series of sessions that were conducted between the government and the investor to negotiate this form of partnership. It has also been noted that the infrastructure sector has mostly been targeted by PPP projects in Jordan than the services sector. This is probably because infrastructure projects are mostly needed in the Jordanian market, and therefore could easily attract investors to invest in such projects with more tangible outcomes and high rate of return on their investments. This is evident in the JEI, the only PPP to target the services sector in Jordan, where tracks with technical, physical nature have been more successful than others. It is also apparent that the GoJ exerts a certain level of flexibility in applying PPP arrangements, either by executing part of the project on a traditional scheme (e.g. the case of ART) or offering partial financial support or subsidy (i.e. as the case in JRS and in AZR).
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<td>1</td>
<td>Samra Waste Water Treatment Plant (SWTTP)</td>
<td>BOT</td>
<td>Water-Infrastructure</td>
<td>US$169 million</td>
<td>- Agreement signed in 2002; Started in 2004</td>
<td>- First BOT model</td>
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<td>The Jordan Education Initiative (JEI)</td>
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<td>Education-Services</td>
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<td>- Difficulties in application as being more optimistic to apply in practice</td>
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<td>Expansion of Queen Alia International Airport (QAIA)</td>
<td>BOT</td>
<td>Transport-Infrastructure</td>
<td>US$750 million</td>
<td>- In 2005, legal and advisory services contract signed</td>
<td>- Faced some delays in construction of the phase 1 due to expansion issues that required more fund.</td>
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<td>- In 2007, phase 1 construction started; expected to be completed in 2011</td>
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<td>- In mid-2011, construction (phase 2) will start; expected to be completed in 2012</td>
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<td>4</td>
<td>Disi Amman Water Conveyor (DAWC)</td>
<td>BOT</td>
<td>Water-Infrastructure</td>
<td>US$ 875 million</td>
<td>- Construction started in 2008</td>
<td>- Suspended, due to an economic and political debate on the project’s feasibility and the relations with the neighbouring countries</td>
</tr>
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<td></td>
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<td></td>
<td>- Suspended in 2009</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Was planned to be completed in 2012</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Medical and Industrial Waste Treatment Plant (MIWTP)</td>
<td>BOOT</td>
<td>Health-infrastructure</td>
<td>Information not available</td>
<td>- In mid 2003, the decision was taken to establish the project.</td>
<td>- Long term process of preparation from 2003 to 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>- The project was awarded to the contracting company end of 2009</td>
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</tr>
<tr>
<td>6</td>
<td>Municipal Solid Waste Collection and Recycling (MSWCR)</td>
<td>BOT</td>
<td>Waste collection/recycling-service/infrastructure</td>
<td>-</td>
<td>- In 2007, the decision was taken to establish the project.</td>
<td>- Tendering process was postponed to allow for project revision, design modification and to develop comprehensive strategy for private sector participation in municipal solid waste management.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>- In 2008, tendering process was postponed</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Amman-Zarqa Light Railway (AZR)</td>
<td>BOT</td>
<td>Transport-Infrastructure</td>
<td>US$ 335 million</td>
<td>- Tendered in 2004; declined in 2005</td>
<td>- Partially subsidised by the government</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Re-tendered in 2006; annulled in 2008</td>
<td>- Investors failed on three different occasions to meet the financial requirements of the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Renegotiated in 2008; deserted in 2009</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- GoJ is currently exploring new options</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Amman Ring Toll-Road (ART)</td>
<td>BOT</td>
<td>Transport-Infrastructure</td>
<td>-</td>
<td>- Phase 1 is currently under construction (traditional procurement)</td>
<td>- The first project in the country to use a mixture of traditional approach and PPP arrangement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Currently preparing to tender phases 2 and 3 (PPP)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Jordan Rail System (JRS)</td>
<td>BOT</td>
<td>Transport-Infrastructure</td>
<td>-</td>
<td>- Tendering process started in 2008</td>
<td>- Anticipated government partial financial support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Phase 1 is expected to start in 2012</td>
<td>- The first project to connect Jordan to its neighbours</td>
</tr>
</tbody>
</table>

*Source: Developed for this study*
To summarise, although the GoJ is rapidly employing PPPs in the Jordanian market, very little scholarly empirical research about PPPs in Jordan has been conducted. Most of the very few research attempts that appear in the PPP literature in Jordan were directed towards documenting some PPP experiences related to specific PPP projects and initiatives (e.g. McKinsey & Company, 2005) and/or assessing the environmental conditions for their potential success (e.g. Al-Jayyousi, 2003). Besides, much is still needed for PPPs in Jordan, as well as most other MENA countries, in terms of the institutional framework, including policy and legal frameworks, macroeconomic management and market failure support (Al-Nasa’a, 2007). Additionally, there is a need for well-prepared and institutionalised project implementation as little action has been initiated in this regard (Al-Nasa’a, 2007). Furthermore, much of the debate about using PPPs in Jordan is still about assessing their technical, financial and political feasibility, and whether these types of hybrid projects are able to offer appropriate avenues to deliver value for money or otherwise use alternative traditional procurement options. This is mainly due to the relatively recent introduction of PPPs to the country and the little practical experience that Jordan has in the implementation aspects of such projects.

In conclusion, very limited research has been conducted on PPPs in Jordan and specifically, not much is known about the management of Jordanian PPPs during the implementation phase in either theory or practice. As such, the four main challenges identified by reviewing PPP literature internationally are assumed to be pertinent in the Jordanian PPPs. Hence, a review of previous research and literature on managing PPPs in Jordan has revealed essential gaps in the following areas:

- Knowledge of the requirements of effective management practices of a PPP in its phase of implementation;
- Detailed knowledge of managing problematic issues and the potential differences that exist among different partners involved in a PPP arrangement;
- The types of management expertise, skills, and leadership needed to effectively manage PPPs;
- The controlling and monitoring mechanisms established to ensure the effective implementation of a PPP, and,
- Detailed knowledge about managing the implementation phase of the Jordanian PPP infrastructure projects.
2.4 THE RESEARCH PROBLEM AND QUESTIONS

2.4.1 The Research Problem

PPP as a phenomenon is described as problematic and complex. The design and implementation of PPPs are usually very complicated issues and potentially fraught with difficulty. It is obvious from the PPP literature review that most of the PPP challenges are emerging in the implementation phase of the project and are managerial problems by their nature in the first instance (also see for example, Weihe, 2008). It is also argued that most of the complexity and uncertainty of PPPs relate particularly to this stage of development. This is also the stage at which the main managerial focus is on resolving the question of how might the partner organisations work together, and covers a host of issues including what, when and how each organisation will contribute to the partnership.

Complexity in PPPs stems from several actors being involved, with divergent perceptions, decision approaches and solutions and the variety of resources that should be combined and injected into the partnership. Further, it is argued that partners involved in a PPP seem to be dedicated to their own procedures, rules and interests. Different actors bring their own differing perceptions and strategies into the partnership. As discussed, many scholars in the field of PPP research agreed that different partners establish different rules, adopt different value systems and working rhythms, different cultural characteristics, concerns and accountabilities, pursue different objectives, interests and exercise ‘partner disparity’ (see for example Huxham & Vangen, 2000; Klijn & Teisman, 2003; Malmborg, 2003; Mann, Pier & Yasin, 2007). As argued by PPP researchers, the public sector is largely based on hierarchical demand mechanisms that are controlled by the top administrators and politicians. The public sector wishes to maximise the sum of the current government’s expected short-term expenditures, on-the-budget expenditures and political costs. The private sector however, wishes to maximise risk-adjusted profits over the contract life. The details of these objective functions are important, because they foreshadow the reasons for conflict and high transaction costs. Researchers in the field of study contended that these challenges are likely to lead to situations in which the public and/or the private sector partner(s) refrain from partnerships. Moreover, this most likely will result in a deep and abiding organisational cultural divide, conflicts between partners, can simply restrict or block...
interaction with other ‘actors’ from other ‘networks’. These differences among partners can have profound reflections on how PPPs are managed, the way problems are addressed, strategic decisions are made and on how solutions are sought, and as a result, the effectiveness of a PPP overall performance (Weihe, 2008).

The assumption here is that the potential success in the implementation phase of a PPP can be gained when issues of concern for both partners are addressed and effectively managed. This also includes the effective management of the IORs between partners and the incompatible aspects of the IOC between their organisations. The Jordan Education Initiative (JEI) experience, for example, has shown that high-performing tracks (i.e. one of the project streams) resulted when they were clearly aligned with partner interests, motivations and strategies (although those interests were very different across partners), whereas the ‘Lifelong Learning’ track achieved the lowest performance because partners’ motivations and goals were less clear than in the other tracks (see also, McKinsey & Company, 2005). In the UK also, East London and City Mental Health Trust P3 project has failed due to serious design, construction and relationship problems between the public and private sectors (Mehra, 2005). Another example of PPP project failure due to poor management, design and labour relations is Parc Prison P3 in Wales in the UK (Mehra, 2005). That is why it is important to understand how, at times conflicting, perspectives are challenged and negotiated between partners involved in the partnership process.

In Jordan research on managing the implementation phase of PPPs has still not been conducted. The majority of the limited research in this field has mainly focused on documenting (and sometimes occasionally, assessing) certain aspects of a PPP project. This deficiency in PPP implementation and management, in theory and practice, then, represents a significant gap in the current PPP literature. Therefore, the focus of this research is on answering the following overarching research problem: How effectively managed is the implementation of PPP infrastructure projects in Jordan, as perceived by their managers?

2.4.2 The Research Questions

To address the overarching research problem, this research will examine the following three research questions and sub-research questions:
1. **In the PPP Management Framework:**

RQ.1: How is the implementation phase of Jordanian Public Private Partnerships (PPPs) managed?

   - **RQ.1.a:** What are effective practices for managing the implementation phase of PPPs in Jordan?
   - **RQ.1.b:** What are the difficulties facing the management of PPPs in Jordan?
   - **RQ.1.c:** How well managed are institutional differences between partners in Jordanian PPPs?
   - **RQ.1.d:** What management expertise and competency is needed in managing PPPs in Jordan?
   - **RQ.1.e:** What are the performance monitoring and controlling mechanisms used to oversee the progress of PPPs in Jordan?

2. **In the Inter-Organisational Relations (IORs) Framework:**

RQ2: What is the environment in which inter-organisational relationships (IORs) in Jordanian PPPs are managed?

   - **RQ2.a:** What is the content, context and nature of the inter-organisational relationships (IORs) between PPP partners in Jordan?
   - **RQ2.b:** How well managed are the IORs between PPP partners in Jordan?

3. **In the Inter-organisational Culture (IOC) Framework:**

RQ.3: What is the context in which inter-organisational culture (IOC) in Jordanian PPPs is managed?

   - **RQ.3a:** How compatible is the inter-organisational culture (IOC) in the Jordanian PPP settings?
   - **RQ.3.b:** How well managed is the inter-organisational culture (IOC) between PPP partners in Jordan?
   - **RQ.3.c:** What are the characteristics of the inter-organisational culture (IOC) that exist between partnering organisations?
CHAPTER 2 SUMMARY

The micro-level managerial aspect of a PPP, particularly in the implementation phase of its development, is described as the most problematic type of management, mainly due to the complicated and uncertain PPP organisational settings. The institutional and organisational differences among partners involved in a PPP arrangement, the sophisticated management competency and expertise required to manage this type of networked, multi-relational and hybridised organisations, and the need for well-established controlling mechanisms to oversee the PPP progress add more challenges to the management and application of PPPs internationally. The problem is that the poor management of PPP projects results in their potential failure and the waste of huge investments, which is especially damaging in developing countries that experience scarcity of resources, as is the case for Jordan.

In theory, the extant body of the PPP literature can be characterised as being fragmented and lacking a well-established theory or set of theories that can assist in providing insights into the management of such hybridised organisations. As such, PPP literature alone was not able to provide concrete grounds for the study at hand. Therefore, other related and co-existent frameworks, namely inter-organisational relationships (IORs), inter-organisational culture (IOC) and PPPs in Jordan, were used for the current research. An overarching research problem and four research questions were developed from a review of the literature on each of these areas of research.

The conceptual perspectives and the literature review for the current research was discussed in this chapter in four main sections. The first provided the conceptual definitions and perspectives of PPP. The second provided a review of previous research on managing PPPs. The third provided a review of other co-existing and related frameworks (IORs, IOC and PPPs in Jordan). The fourth presented the research problem and research questions.

Chapter 3 outlines the methodology used to conduct the current research. The research methodological context, design issues, procedures for data collection and analysis and, issues of validity, reliability and research methodological limitations are also discussed.
CHAPTER 3: RESEARCH DESIGN & METHODOLOGY

INTRODUCTION

It was concluded after reviewing the literature on Public Private Partnerships (PPPs) as well as related fields (inter-organisational relationships and inter-organisational culture) deeper insight into the management of the implementation phase of a PPP project is still needed. Chapter 1 and 2 presented the ontological aspects of the current research, including the nature and the problem of the current research (e.g. managing PPPs as the subject of inquiry). This chapter, Chapter 3, outlines the processes used to explore this issue and explains the epistemological aspects (i.e. how knowledge is acquired and the relationship between the researcher and the researched) and the methodological framework that was chosen to conduct this research.

This chapter includes four main sections. The first section presents the methodological context of the research including its theoretical paradigm, orientation and geographical domain. It also includes a discussion of the choice of qualitative research and case study approaches and a consideration of ethical issues. The second section presents the research design including a discussion of the case study design and projects, developing, refining and finalising the data collection instrument and procedures. The third section provides a discussion of the interview procedures and process of data collection and analysis. The fourth section presents a discussion of validity and reliability issues and methodological limitations of the research (see Figure 3.1).
3.1 RESEARCH METHODOLOGICAL CONTEXT

The theoretical framework and the topic of the research drove the choice of qualitative research and case study approach. Due to the limited research on the subject matter, this research was designed as an exploratory study. The research was guided and informed by a constructivist paradigm is based on data collected from case studies of two PPP infrastructure projects in Jordan.

3.1.1 Theoretical Paradigm

A paradigm or an interpretive framework is defined as a “basic set of beliefs that guide action” (Guba, 1990; cited in Denzin & Lincoln, 2003, p. 33). It is also a “net that contains the researcher’s epistemological, ontological and methodological premises”
Managing PPP infrastructure projects in Jordan

(Denzin & Lincoln, 1998, p. 26). According to Denzin and Lincoln (2003), all research is interpretive, as it is guided by feelings and beliefs about the world and the way it should be studied and comprehended. According to these researchers, a paradigm informs a certain research approach to follow and poses demands on the researcher and the research in the way it should be conducted (see Appendix 3.1).

The arguments and the assumptions in current research are guided and informed by the constructivist paradigm (see Table 3.1). Constructivism in research is best described by Denzin and Lincoln (2003) as follows:

[It assumes] “a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent create understandings) and naturalistic (in the natural world) set of methodological procedures [...] Terms such as credibility, transferability, dependability, and confirmability replace the usual positivist criteria of internal and external validity, reliability and objectivity” (p. 35). “The theory form in this paradigm is viewed as substantive-formal and the type of narration is interpretive, case studies and ethnographic fiction” (p. 34).

Schwandt (1998) confirmed that knowledge and truth are created, not just discovered by mind. As such, the human mind is active in the construction of knowledge and in processing our impressions of the objects we see in everyday life settings. That also means that we do not find or discover knowledge, rather, we construct or make it. Further, constructivists believe that “we invent concepts, models, and schemes to make sense of experience, and further, we continually test and modify these constructions in the light of new experience” (Schwandt, 1998, p. 237). In that sense, Schwandt (1998) contended that if we agree that knowing is not passive, and that the mind is active in the construction of knowledge, then we are all constructivists.

According to Denzin and Lincoln (1998; 2003), constructivism is the only paradigm in which case studies are used as a type of narration. In comparison, a scientific report is the type of narration that is used in the positivist paradigm; essays and stories in the feminist and ethnic paradigms; historical, economic and sociocultural analysis in the Marxist paradigm; and, cultural criticism in the cultural studies paradigms. Also, understanding and reconstruction are the major inquiry aims to constructivism, which obviously corresponds to the aims of the current research. In contrast, critique and
transformation are the main aims of the critical theories (the feminist and ethnic) and explanation (i.e. prediction and control) is the main aim in conducting research following the positivist and postpositivist paradigms (Guba & Lincoln, 1998).

Further, other research paradigms such as the *positivism* and *postpositivism* are best suited to logical-deductive, scientific, and grounded theoretical frameworks (Denzin & Lincoln, 2003), that rely on experimental and survey research designs that are difficult to apply to most social phenomena such as the case in the current research. The *feminism* (also described as afrocentric, poststructural and ‘materialist-realistic’ research) which uses the lived experience, dialogue, accountability, race, class and emotion have little relevancy to the current research, because the research at hand focuses on the management practices and experiences of the study informants more than their gender, age, race or class. Similarly, the *ethnic* critical models, which are also afrocentric and use the lived experience, dialogue, accountability, race, class and gender, do not seem to suit the nature and objectives of the current research for the same reason. Likewise, other paradigms, such as the *Marxist* (which uses dialogical, accountability, race, class, gender criteria) and *cultural* studies (which adopt social criticism and historical analysis as forms of theory) (Denzin & Lincoln, 2003), were deemed the least appropriate to employ in the current research. To conclude, constructivism is deemed to be the best to suit the nature of the current research in achieving its goals and objectives and to inform its arguments.

### 3.1.2 Research Orientation

Due to the limited scientific knowledge on the subject matter of PPPs internationally, as well as in Jordan specifically, this research is designed to be an *exploratory* study. More specifically, the current research aims to provide a deeper understanding of how effectively managed is the implementation phase of PPP infrastructure projects in Jordan. It attempts to do so by exploring the requirements for effective PPP management practices, the problematic issues facing the implementation of PPP projects, the management expertise and competence required, and the controlling mechanisms that are most needed to manage PPP projects. Also, it attempts to do so by examining inter-organisational relationship (IOR) management approaches that partners use to address and manage their relationships, and by examining the characteristics of
the inter-organisation culture (IOC) that can emerge in situations where two or more organisations are involved in a partnership. Notably, it is apparent that the current research primarily seeks answers to ‘what’ and ‘how’ types of research questions, and therefore, it is designed to be an exploratory study, as opposed to the explanatory type of research that is mainly directed to seek answers as to the ‘why’ type of research questions (Vaus, 2001). It does so, by seeking an explanation of the phenomenon under study, which although important, is not the major focus of this study.

3.1.3 Qualitative Research Approach

The current research has adopted a qualitative research approach for data collection and analysis to investigate how effectively managed are the Jordanian PPP projects during their implementation. It is argued that qualitative research “is likely to produce important advancement in the organisational sciences during the next decade” (Aguinis et al., 2009, p. 109) because of its association with theory origination and building processes. Qualitative research is defined by Snape and Spencer (2007) as a “naturalistic, interpretive approach concerned with understanding the meaning which people attach to phenomena (actions, decisions, beliefs, values, etc.) within their social world” (p. 3). Qualitative research is directed towards providing an in-depth knowledge and understanding of the phenomenon under study; using small scale samples, selected based on salient issues; and, collecting very detailed, rich and extensive data using interactive methods that allow issues to be explored (Snape & Spencer, 2007). Further, qualitative research is oriented towards using methods of data analysis that assist concepts to emerge and to develop typologies and explanations of the emerging concepts. It then uses outputs to interpret social meaning through mapping and ‘representing’ the social world of research informants (Snape & Spencer, 2007). Furthermore, qualitative research assumes that an unstructured method of inquiry encourages interviewees to choose their own interpretations, thus enabling a greater understanding for the phenomenon under study and the potential for new insights and perspectives to emerge (Aaker, Kumar & Day, 2001) which is most suitable for the current research.
### Table 3.1: The current study’s interpretive framework (research context, design and outcome)

<table>
<thead>
<tr>
<th>1. Research Context and Background (The research and the researcher)</th>
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<tbody>
<tr>
<td><strong>Theoretical paradigm</strong></td>
<td>Constructivism (Relativist ontology, subjectivist epistemology and naturalistic set of methodological procedures)</td>
</tr>
<tr>
<td><strong>Research orientation</strong></td>
<td>Ontologically-oriented; exploratory; <em>ex post facto</em> theorising; and, qualitative research</td>
</tr>
<tr>
<td><strong>Ethical considerations</strong></td>
<td>Griffith University ethical approval, Ref. No: MGT/03/09/HREC</td>
</tr>
<tr>
<td><strong>Methodological limitations</strong></td>
<td>Difficulties to include others’ views, limited number of case studies and dual language challenges in conducting the interviews</td>
</tr>
<tr>
<td><strong>The researcher</strong></td>
<td>A Jordanian national, studying in Australia gaining an insider/outsider view of the research problem and directions</td>
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<table>
<thead>
<tr>
<th>2. Research Design and Strategies</th>
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<tbody>
<tr>
<td><strong>The research problem</strong></td>
<td>How well managed is the implementation phase of PPP infrastructure projects in Jordan?</td>
</tr>
<tr>
<td><strong>The research purpose</strong></td>
<td>Offer deeper insights into the effectiveness of managing PPP projects in Jordan during their phase of implementation; and, assist other research efforts to build a more coherent PPP theory</td>
</tr>
<tr>
<td><strong>The research strategy</strong> (Locating paradigm in a specific empirical sites and methodological practices)</td>
<td>Case study approach; sequential design strategy; retrospective design; intensive and extensive case studies; selected based on theoretical sampling technique</td>
</tr>
<tr>
<td><strong>Data collection</strong></td>
<td><strong>Data Sought:</strong> the effective management of the implementation phase of PPP infrastructure projects in Jordan, including managing IORs and IOC between partnering organisations</td>
</tr>
<tr>
<td><strong>Tool/ Technique:</strong></td>
<td>Faceto-face, in-depth interviews</td>
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<td></td>
<td>Open-ended, semi-structured interviews</td>
</tr>
<tr>
<td></td>
<td>Supported by data collected from the Websites (of the partnering companies) and media and news releases</td>
</tr>
<tr>
<td><strong>Participants:</strong></td>
<td>Selected informants at the senior managerial level in the partnering organisations involved in each PPP project</td>
</tr>
<tr>
<td><strong>Study 1: QAIA</strong></td>
<td>Stage: construction</td>
</tr>
<tr>
<td></td>
<td>Participants: senior level managers in the partnered organisations (a total of 11)</td>
</tr>
<tr>
<td></td>
<td>Validity check: return transcripts to participants to ensure accuracy of meaning</td>
</tr>
<tr>
<td><strong>Study 2: SWWTP</strong></td>
<td>Stage: operation</td>
</tr>
<tr>
<td></td>
<td>Participants: senior level managers in the partnered organisations (a total of 10)</td>
</tr>
<tr>
<td></td>
<td>Validity check: return transcripts to participants to ensure accuracy of meaning</td>
</tr>
<tr>
<td><strong>Data analysis</strong></td>
<td><strong>Thematic analysis</strong> (to identify the dominant themes)</td>
</tr>
<tr>
<td></td>
<td><strong>Leximancer software</strong> (to assist with data organisation and management)</td>
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<tr>
<th>3. Research Outcome and Final Product</th>
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<tr>
<td>• Deeper understanding of the effective management of PPP projects in Jordan that can be replicated in other similar contexts</td>
<td></td>
</tr>
<tr>
<td>• Assisting the establishment of a coherent PPP theory</td>
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*Source: Developed by the researcher for the current research.*
There are also other several reasons for choosing a qualitative research approach for the current study. First, the qualitative research approach to data collection aims to discover information from the perspective of the interviewee about complex phenomena such as experiences, behaviours and attitudes that are not directly observable (Rao, 2003). It has the potential to address the complicated and confused nature of research issues and allows the researcher to deal with the complexity, context and ‘persona’ aspects and their multitude of factors and relationships (Gummesson, 2006). As such, a qualitative research approach has assisted the current research in capturing and elaborating on soft concepts such as management skills, practices, processes and dynamics. Specifically, in the qualitative type of research, and particularly in case studies approach, the main objective is to capture the specificity of how people in the real world perceive, behave, act and react to their daily life situations. The idea is to draw conclusions by induction and possibly to reflect on other similar or dissimilar situations (see also Stake, 1998). Therefore, qualitative research approach has also helped in drawing a more accurate picture of the researched issues by exploring the underlying perceptions, views and experiences of the study informants. Such perceptions and experiences were not limited to a forced choice between often unsuitable options provided in questionnaire format, which are frequently without access to further interpretation in the quantitative research approach (see also Shacklock, 2008). Further, it has assisted this research in gathering information and in-depth exploration of the issues researched in a more flexible and less structured format.

Second, it is also argued that the choice to undertake qualitative research depends upon the nature of the research question. The research questions for the current research start with ‘how’ and ‘what’ and can thus be best answered using a qualitative research approach, contrasted with quantitative research that often ask ‘why’ research questions and look for a cause and effect relationship between variables (Creswell, 1998). Third, this approach was valuable because of the need to present a detailed view of the research topic since the wide-angle lens of the distant panoramic shot of the quantitative research approach will not suffice to present a more focused view of the research topic, and therefore, be able to answer the current research problem and questions (Creswell, 1998). Fourth, the researcher has a personal preference for the storytelling, flexible and exploratory type of research that the qualitative approach offers (see, Gummesson, 2006).
3.1.4 The Geographical Domain of the Research

The infrastructure needs in the MENA countries are large and the majority of the countries are unlikely to be able to finance their infrastructure needs out of their government budgets. Consequently, they have turned to the private sector, mainly through PPP arrangements, to assist in meeting these economic development needs.

Jordan is a developing, middle-income country, which has scarce natural resources. It is argued that Jordan exhibits many features of a ‘competition state’ in terms of the promotion of PPPs (Al-Jaghoub & Westrup, 2003). PPPs are considered a key component of the country’s economic development strategy (El-Khatib, 2008). This is evident from the government of Jordan’s effort to use PPPs rapidly in both infrastructure and services sectors. However, PPPs are newly introduced to the Jordan economy and much is still needed for PPPs in terms of the institutional and legal frameworks. Additionally, not much is known about the management of the implementation phase of Jordanian PPPs in either theory or practice, therefore, the need to review this newly introduced PPP experience in Jordan.

This research has been purposefully planned to be conducted in Jordan because the researcher has a sound knowledge of the Jordanian economy, society and culture, and therefore, has gained an ‘insider’s view’ to capture such sensitive and sophisticated research issues as inter-organisational relationships and culture. Conducting research in Jordan also has the advantage of its political and social openness, relative to other countries in the region where research permits are required and are difficult to obtain (Loewe, Blume, & Speer, 2008). Additionally, conducting this research in Jordan was suitable because the two selected PPP projects met the objectives of the current research in that they are at two stages of the PPP implementation phase: construction and delivery (see Figure 3.2).

31The researcher is aware of the possible limitations of adopting an insider view, hence has been able to remain objective by adopting an ‘outsider view’ academic distance of the issues researched by not being employed in any of the organisations researched and being based overseas during the period of conducting this research.
3.1.5 Case Study Approach

Case studies can be described as rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources (Yin, 2003). As argued by Lewis (2007) “the term ‘case study’ is strongly associated with qualitative research [and] it sometimes appears to be used as a synonym for qualitative research” (p. 51). A distinctive defining feature for case studies is the multiplicity of perspectives which are deeply related to a particular context by using multiple or single method of data collected from participants with different perspectives (Lewis, 2007). Accordingly, the sample design in case studies is strongly related to the context of the research issue (e.g. the process, such as people’s interactions and relationships) more than the personal attributes of the participants themselves as a critical factor in understanding the phenomenon being researched (Lewis, 2007).

In light of this, case study designs can build up a full account of very detailed, in-depth knowledge and understanding to provide a holistic, comprehensive and a contextualised picture of a research issue. The objective is to build a theory or to “create theoretical constructs, propositions and/or midrange theory from case-based, empirical evidence .. from which to develop theory inductively that is accurate, interesting and testable” (Eisenhardt & Graebner, 2007, p. 26).

The value of case studies as described above aligns with the objectives of the current research. Particularly, case studies focus on the context of the research issue through reflecting on the perceptions, perspectives and experiences of the study informants, more than their personal characteristics, in an effort to seek a detailed and comprehensive understanding of the researched issues. In addition, the case study approach supports the primary objective of this research in modelling the phenomenon under study.

The current research applied the strategy of sequential case study design in which case studies followed one another (see Figure 3.2), as opposed to the parallel design strategy. The advantage of the sequential design is that “some of the issues examined can be informed by puzzles identified in earlier cases” (Vaus, 2001, p. 227).
In addition, prospective research design was mainly used in this study. The prospective approach involved tracking changes forward over a certain period of time during the data collection and analysis stages. The prospective research design has the advantage of enabling the researcher to look at events as they occur, and therefore, to provide a better understanding of the dynamics of a social phenomenon. However, due to the time constraints, it was not possible to use the full potential of a retrospective case study design beyond the period of data collection and analysis using archival records and documents. Alternatively, during interviews, the informants were asked to elaborate further on certain salient past events and to reflect on their past experiences in addressing and dealing with these events.

Additionally, the strategy of selecting two case studies for the current research has provided the opportunity to use both intensive and extensive case study approaches. The intensive case study has provided a detailed, comprehensive and contextualised description and a deeper understanding of a single case from the inside. The extensive approach has provided the opportunity to elaborate, test and generate a potential generalisable theoretical construct by comparing the findings generated from the two cases during the process of data analysis (see, Eriksson & Kovalainen, 2008).

3.1.6 Ethical Considerations and Control Tactics

In Australia, any research project needs prior ethical clearance. Therefore, ethical considerations related to the integrity, confidentiality and anonymity required were maintained for the current research. To ensure this, ethics approval was obtained by the relevant Ethics Committee under Griffith University’s Ethics Policy. A final ethics report was submitted at the end of the data collection period.

Ethical control for this study was achieved in a number of ways. First, participation in the study was completely voluntary, where respondents were given appropriate time to consider their participation in the research. Second, the interviewees were given an informed consent form (see Appendix 3.2), which was printed on a Griffith University letterhead and clearly stated the objectives of the current research. Participants were asked to read the consent document carefully before they participated. Consent forms signed by all interviewees who agreed to participate were collected before interviews.
commenced. Third, the interviewees were not asked to provide their names or other personal details to preserve their anonymity and to ensure confidentiality (unless they required summary of results). Alternatively, a coding system was designed and used to preserve the anonymity of the interviewees (see Appendix 3.3). Fourth, participants were given the choice to refuse to answer any question or stop the interview at any time. They were assured that withdrawing from the interview would not result in any negative consequences for them. Fifth, the interviewees were assured that their participation posed no risk to them, as they were only asked to identify their perceptions of managing the implementation phase of their PPP project. Sixth, because the interviews were planned to be audio-recorded, permission was sought from the interviewees prior to conducting the interviews. The audiotapes were then erased following transcription and analysis. Finally, data collected from respondents were stored securely and access to the stored data was limited to the research team. A summary of results were made available to participants on request via their email addresses given voluntarily in the consent form.

3.2 RESEARCH DESIGN

3.2.1 Case Study Design (Sampling and Selection)

Two case studies were chosen for the current research. These cases represent two PPP infrastructure projects in Jordan. Using more than one case retrospectively is useful to inquire into a particular phenomenon under study. In essence, case studies “are chosen because it is believed that understanding them will lead to better understanding, perhaps better theorising, about a still larger collection of cases” (Stake, 1998, p. 89). Selecting particular case studies is best described by Stake (1998), who commented:

“.. a particular case is examined to provide insights into an issue or refinement of theory. The case is of secondary interest; it plays a supportive role, facilitating our understanding of something else.. The case may be seen as typical of other cases or not.. the choice of case is made because it is expected to advance our understanding of what other interest” (p.88).

The cases for the current research were selected based on a theoretical sampling technique. That is, cases were particularly selected because they were suitable for
illuminating and extending relationships, logic among constructs and for the likelihood that they will offer theoretical insights (See also, Eisenhardt & Graebner, 2007). The point here is to select the most strategic cases for theoretical and targeted purposes and that cases selected have particular characteristics for informing the research topic and its proposed assumptions and the likelihood to provide an opportunity for comparisons. It also assumes that the researcher knows something about the case before the case study proper begins (Vaus, 2001). This also means simultaneous collection and analysis of the data to lead to the decision of where and what data need to be collected next. Experts argue that, this sampling technique “leads to very clear pattern recognition of the central constructs, relationships and logic of the focal phenomenon” (Eisenhardt & Graebner, 2007, p. 27).

The selection of the cases for the current research was informed by their distinctive characteristics to offer a valid set of theoretical implications as well as deeper insights into exploring how effectively managed are PPP infrastructure projects in Jordan. First, the two cases selected are located in Jordan and are infrastructure projects, which assisted the current research in establishing a more valid, relevant and reasonable comparison basis between them as being ‘externally homogeneous’. Second, the two cases are in different stages of their implementation phase (e.g. internally heterogeneous). The first (Queen Alia International Airport- QAIA) had started the construction stage and the second (Samra Waste Water Treatment Plant- SWWTP) had completed construction and started the operation stage when data collection was undertaken (see Figure 3.2). This assisted this research to simultaneously capture what was happening in both stages of the implementation phase of PPP development. Third, the selected cases involve huge investment and are considered to be ‘critical’ to a small economy such as Jordan. Fourth, the selected cases have already been established and are in progress, compared to many others which are still in earlier stages of their development (see Table 2.7), and therefore, were assumed to offer in-depth insights.

Fifth, it has been recognised that the selection of a case study approach depends on the nature of the research question. Theory-driven research questions (contrasted to phenomena-driven research questions), are ‘tightly’ scoped and the justification rests heavily on “the ability of qualitative data [e.g. using case studies] to offer insights into complex social processes that quantitative data cannot easily reveal” (Eisenhardt &
Graebner, 2007, p. 27). Because the aim of this research is to offer deeper insights into understanding and exploring fuzzy and chaotic social interaction processes of relationships and cultural issues embedded in a PPP management setting, its research questions were eventually ‘theory-driven’ in type and oriented towards facilitating theory-building processes.

**Figure 3.2: Development status of the projects selected for this study during the period of data collection**

Sixth, in deciding to select certain case studies among other possible cases, Vaus, (2001) suggested that the researcher “must be guided by what is practical within the constraints of time, money and access to relevant cases” (p. 241). Following Vaus’ (2001) advice, the selection decision of cases for the current research was based on the availability and convenience of PPP infrastructure projects in Jordan. Infrastructure-type projects, in particular, were chosen for this study in favour of other service sector projects, because of their visible and tangible implementation processes that made it easier to follow up and capture ‘soft’ research concepts such as relationships, perception of effectiveness and cultural issues.

### 3.2.2 Case Study Organisations

The following is a detailed description of the case study projects selected for the current research: the Queen Alia International Airport (QAIA) and the Samra Waste Water Treatment Plant (SWWTP). The presentation of the two studies includes an overview of the projects and details of the partnership arrangements and structure in each.
3.2.2.1 Study One: Queen Alia International Airport (QAIA)

The expansion of the QAIA was originally planned to meet increasing demands and to handle projected traffic volumes of the airport in Jordan, and at the same time to enhance and develop its position as a regional hub to serve the increasing demands on the airport regionally. It also aimed to increase service quality standards to provide passengers with improved services in line with the best international practices. In addition, the project was initiated to introduce private sector finance and technical know-how to one of the most significant service sectors of the Jordanian economy.

The project agreement included that the construction of the new terminal be performed in two main phases. In the first phase, completion of which is planned by the first quarter of 2011, the expansion works will provide a total capacity for up to 5.5 million annual passengers (MAP), over the capacity of the existing airport which is currently 4.77 MAP. The second phase, which is planned to be completed and fully operational in the first quarter of 2012, includes expansion for a capacity of up to 12 MAP. The project agreement stipulates that the second phase will start based on the traffic growth achieved on completion of the first phase of the project.

Brief History

In June, 2006, the GoJ officially launched the bidding process for the long term ‘concessioning’ of the QAIA by publishing a request for Expressions of Interest (EI) to local, regional and international private sector companies to invest in the expansion and the rehabilitation of the airport. In response, more than 30 international companies expressed their interest in the project. Following a competitive bidding process, the Aerports de Paris Consortium was announced as the winning bidder in April 2007. Seven months later, this consortium formed a private company, named the Airport International Group (AIG), to handle the managerial, financial and operational aspects of the project. A project agreement was signed between the GoJ and the AIG in May 2007 to start construction on site. In November, 2007, AIG became responsible for the operation of the airport, the rehabilitation of the existing facilities and the construction of the new passenger terminal.
By October 2008, AIG has created new access roads, new car parks, pick-up and drop-off areas, taxi and bus stops. A new car park management plan came into play to accommodate the construction site of the new airport terminal building with the creation of short and long-term car parks. To date, QAIA is undergoing a complete transformation. The existing terminals are in the process of refurbishment, while in parallel, extensive construction is underway to build a new passenger terminal.

**PPP Arrangement**

The QAIA project involves the rehabilitation and modernisation of the existing airport facilities, and at the same time, the engineering, construction, operation and maintenance of a new terminal building using the BOT (Build, Operate and Transfer) form of PPPs. The estimated cost of the project is US$ 700 million with a concession period of 25 years. The commissionaire, the AIG, representing the private sector partner, was given the exclusive rights to operate, manage and develop the QAIA and capture the revenues generated by the project. Aerports de Paris (a member of the group) was assigned the responsibility of managing the airport on behalf of the AIG. Likewise, the Program Managements Unit (PMU), which is structurally part of the Jordan Airports Establishment (JAE), the investment hand of the Ministry of Transport (MoT), was given the role of managing the project, representing the public partners. Table 3.2 shows the main partners, ‘parent-partners’ and participants involved in the project and the nature of their involvement.

**Understanding the Structure of the Project**

International-type PPP projects tend to be very diverse in nature. When it comes to the BOT form of PPP projects, what is commonly required is a group of companies that can together leverage their various assets needed to carry out such a huge project. In essence, projects of this kind are assumed to have a high level of sophistication that involve several local, regional and international partners and participants. These

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32 This was increased later to US$750 to facilitate expansion and improvement of the design.

33 The term ‘partner’ is used here to mean those organisations that are directly involved in the management of the PPP projects, whereas the term ‘participant’ refers to those organisations that have contributed to the PPP project, but are not involved in the management of these projects. ‘Parent-partner’ refers to those organisations that are considered partners, however indirectly involved in the management of the PPP project.
partners and participants play different roles within a specialised technical expertise required in the construction and operation and within overall financial capacities and managerial competencies to establish and run these projects. However, to decrease this claimed apparent high level of sophistication that stems from the difficulty of directly involving all participants in the managerial, financial and operational aspects of the project, a simplified structure is created to handle such complexity.

Table 3.2: Partners involved in QAIA and their contribution

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Identity</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Public Partners</td>
<td>Jordan</td>
<td></td>
</tr>
<tr>
<td>Jordan Ministry of Transport (MoT)</td>
<td>Parent-partner; Jordan</td>
<td>The investment hand of the MoT</td>
</tr>
<tr>
<td>Project Management Unit (PMU)</td>
<td>Partner; Jordan</td>
<td>Managing the new extended QAIA project</td>
</tr>
<tr>
<td>Jordan Airports Establishment (JAE)</td>
<td>Parent-partner; Consortium Jordan</td>
<td>A consortium representing the public partner; Totally owned by MoT</td>
</tr>
<tr>
<td>Civil Aviation Regulatory Commission (CARC)</td>
<td>Participant; Jordan</td>
<td>The regulating body of the civil airports in Jordan</td>
</tr>
<tr>
<td>Queen Alia International Airport (QAIA)</td>
<td>Participant; Jordan</td>
<td>Managing the old/existing QAIA</td>
</tr>
<tr>
<td>The Private Partners</td>
<td>Multi-national</td>
<td></td>
</tr>
<tr>
<td>The Airports International Group (AIG)</td>
<td>Parent-partner; Consortium</td>
<td>A Jordanian company comprising a consortium of local, regional and international partners</td>
</tr>
<tr>
<td>Aeroports de Paris Management (AdP)</td>
<td>Partner; France</td>
<td>Handles day-to-day operations and managing the airport (owns 9.5% of the shares)</td>
</tr>
<tr>
<td>Joannou &amp; Paraskevaides (J&amp;P)</td>
<td>Participant; Cyprus</td>
<td>Financial participation (owns 9.5% of the project shares)</td>
</tr>
<tr>
<td>Joannou &amp; Paraskevaides (J&amp;P-Avax)</td>
<td>Participant; Greece</td>
<td>Financial participation (owns 9.5% of the project shares)</td>
</tr>
<tr>
<td>Abu Dhabi Investment Company (Invest AD)</td>
<td>Participant; United Arab Emirates (UAE)</td>
<td>Financial shareholder (owns 38% of shares); An investor on behalf of Abu Dhabi Government to attract and manage third-party funds</td>
</tr>
<tr>
<td>Noor Financial Investment Company (NFIC)</td>
<td>Participant; Kuwait</td>
<td>Financial shareholder/ investor (owns 24% of the shares)</td>
</tr>
<tr>
<td>Edgo Jordan Group</td>
<td>Participant; Jordan</td>
<td>Financial shareholder/ investor (owns 9.5% of the shares)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Finance Corporation (IFC)</td>
<td>Participant; International</td>
<td>The exclusive Lead Transaction Advisor; The commercial arm of the World Bank in funding the project</td>
</tr>
<tr>
<td>The Islamic Development Bank</td>
<td>Participant; Jordan</td>
<td>Funding the project</td>
</tr>
<tr>
<td>White &amp; Case LLP</td>
<td>Participant; International</td>
<td>An international legal counsel</td>
</tr>
<tr>
<td>Netherlands Airports Consultants</td>
<td>Participant; International</td>
<td>A technical consultant</td>
</tr>
<tr>
<td>Fosters &amp; Partners Architects</td>
<td>Participant; United Kingdom (UK)</td>
<td>The terminal designer</td>
</tr>
</tbody>
</table>

In the case of QAIA, and in January 2008, the MoT established the Jordanian Airports Establishment (JAE; a government establishment) to act as its investment arm for the ministry, which was assigned the role of managing projects that were particularly related to renovating or expanding any of the existing airports or establishing new airports across the country, using PPP or any other arrangements such as traditional procurement, contracting out or privatisation. The Project Management Unit (PMU),
which was previously established within the organisational structure of the MoT, represents the public partner in the management of the expansion process of QAIA project. Before the JAE has come into existence, the PMU was structurally part of the MoT. After the establishment of the JAE, the PMU became part of the JAE and was assigned the role of overseeing and managing the new QAIA project in particular. So, the PMU is structurally related directly to JAE and indirectly to the MoT. Functionally, the PMU is a separated entity, with a semi-independent organisational structure, while still being institutionally related to the JAE and MoT (see Figure 3.3).

Likewise, the six companies that represent the private sector partner brought together experience in finance, airport operations, construction and management and formed a consortium called the AIG 34. The AIG is responsible for the maintenance and rehabilitation of the existing airport landside and airside facilities. It is also responsible for the design, engineering, procurement and rehabilitation of the new passenger terminal. The Aerport de Paris (a member of the AIG consortium) takes the role of day-to-day operation and management of the QAIA project (see Figure 3.3).

Figure 3.3: The QAIA structure

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34 AIG is a Jordanian company with multi-local, regional and international shareholders.
Although the PPP arrangement of the QAIA project involves contributions and participation from several organisations, few of them are directly involved in the managerial aspects of the project. The PMU which represents the public sector partner and the Aerport de Paris which represents the private sector partner are directly responsible for the day-to-day operation and management of the project. Because the current research is primarily directed towards the management aspects of the PPP projects during their course of implementation, researching these two ‘managerial entities’ is the focus of this research.

3.2.2.2 Study Two: Samra Waste Water Treatment Plant (SWWTP)

There is a significant shortage in water supply in almost all MENA countries. Experts have anticipated that available water per capita in the region is expected to halve in the coming forty years with an area population of 300 million projected to reach 500 million by the year 2025. It is well known that Jordan, particularly, suffers from a severe water scarcity problem, with an increasing demand for water resulting from escalating population growth and economic development. Most traditional water resources in the country are fully utilised, and even non-traditional resources, such as the brackish waters of the Zara-Maeen project, are being processed and put into operation (PMU, 2009).

In addition to the shortage of water supply in Jordan for domestic use and agricultural and industrial purposes, the SWWTP was also instigated because of the problem caused by the odour, lagoons and waste stabilization bonds that stemmed from the untreated water in the Samra Valley (PMU, 2009). With a budget of US$169 million, the SWWTP was originally planned to provide significant quantities of irrigation water to farmers in the Jordan Valley and thus free the fresh water resources of the Valley for domestic uses in the Amman and Balqa regions. The plant was also constructed to strictly control the treated and discharged water so as to comply with the Jordanian and international standards for agricultural use. In addition, the plant was designed to improve environmental and health conditions in the surrounding areas (there are approximately 2 million residents in Amman and Zarqa, the two major cities in Jordan).
The SWWTP involved the construction of new wastewater treatment facilities, and at the same time, modification and expansion of the Ain Ghazal pre-treatment facility. It also involved the maintenance of the main pipeline which collects wastewater from Amman, the capital city, and the surrounding suburbs. Together, these improvements have replaced the overloaded and inadequate old waste stabilization pond treatment system.

**Brief History**

A study conducted by the United States Agency for International Development (USAID) in 1997, and later studies conducted by the Ministry of Water and Irrigation (MWI) in Jordan, recommended the construction of a plant to treat a daily average of 270,000 m$^3$ of waste water collected from the stations of the grid's inlets in Amman and the surrounding areas. By the end of 2003, the SWWTP was announced by signing the project agreements between the MWI and Samra Procurement and Construction Company (SPC). The construction process in the site started in February 2004, and by mid 2005, nearly 25% of the construction work was completed. In August 2008, the project was officially launched after about five years of construction.

**The Significance of the Project**

The SWWTP is considered the biggest environmental project of its nature and volume in Jordan, and the first PPP for wastewater treatment facility in the Middle East. It is also the first wastewater treatment facility in the region to have used a combination of public and private partners from local, regional and international organisations. In addition, this project is the first USAID-financed PPP project worldwide. Based on the project’s design and implementation, USAID anticipated that this project will serve as a model for future water investments in the region.

Technically, the plant uses sophisticated processes of biological and tertiary treatment, biogas reuse system, hydropower technology, ventilation air treatment and sludge treatment processes (PMU, 2009). Since its completion in 2008, the facility has treated more than 56 million cubic meters (MCM) of wastewater and has served two million Jordanians and substantially increased water availability for use in agriculture in the
Amman and Zarqa regions (PMU, 2010). Significantly, the plant has also produced high quality effluent in terms of BOD5, TSS and COD standards. Compared to the situation prior the project operation, where the BOD5 had reached three times the allowable standard value. This improvement has significantly reduced the groundwater pollution and the hyper-eutrophication of King Talal Reservoir (PMU, 2009). Moreover, for farmers located in the Jordan Valley who use the King Talal Dam water to irrigate their farms, the improvement of the water quality means less maintenance for their irrigation system (e.g. clogging of emitters) and so higher revenues (PMU, 2009). In addition, a new pipeline has been recently constructed at the outlet of Samra Plant in order to convey treated wastewater to local fodder producers who until recently had to use untreated raw wastewater. Switching from irrigating with raw water to treated water has improved public health in the area (PMU, 2009).

A Model for Sustainable Development

The SWWTP can be considered as a step in the beginning of a new era in the management of water in Jordan and in the region through the use of the biogas and the hydraulic potential energy produced by its hydropower plants. With 37,000 MWh of renewable energy used in 2008, SWWTP is a quasi self-sufficient treatment plant. This has improved the economic fundamentals of the project, and therefore, it can be regarded as a model for sustainable development in the region through reduced reliance on fossil resources and reduction of greenhouse gas emissions in the atmosphere (PMU, 2009). In 2009 the SWWTP was presented in the United Nations as a recognised ‘Clean Development Mechanism Project’. This project was also chosen as ‘Project Finance Deal of the Year’ in 2004 by Euromoney Finance Magazine.

Additionally, the project includes cooperation with ArRajihi Company, a nearby cement factory, in using the sludge produced from the plant as an alternative fuel for its operations. The implementation of this approach, which consists of reusing the sludge produced by the plant as fuel, is the first in Jordan. Hence, in a world where saving of fossil resources, protection of potable water and access to it, and reduction of toxic gas emissions to avoid destroying the ozone layer, have become the most important

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35 The project is now focusing on the valorisation of the 100 tons of sludge produced every day by the plant.
environmental challenges, the Samra project appears as a sustainable development project to provide a good contribution to confront these challenges (PMU, 2009).

**The PPP Arrangement**

As a result of a competitive bidding process, Infilco Degremount and Morgantti were announced as the successful bidders for this project in 2003. These two main companies, which represented the private party in the project agreement established the Samra Plant Consortium (SPC) to take the role of the design, construction, operation and maintenance of a new wastewater treatment plant under a 25-year agreement, using BOT form of PPPs. The SPC is also responsible for maintaining the main pipeline which collects wastewater from the stations that collect wastewater from the grid's inlets.

Out of US$ 169 million, the total cost of the project, the USAID participated US$ 78 million as a grant, the government of Jordan participated US$ 14 million and US$ 17 million was from the SPC participation in the project. The remaining amount (US$ 60 million) was participation from a bank consortium led by the Arab Bank.

The MWI and the Programme Management Unit (PMU) in the MWI are the main parties representing the public partner in the project. The project also involved participants from other local, regional and international public and private sector organisations. These participants have contributed to the partnership by offering specialised managerial, technical or financial expertise to one or more of the public and private sector partners. Table 3.3 shows the main partners and other participants involved in the SWWTP project and the nature of their contribution.

**Understanding the Structure of the Project**

In 2003, Infilco Degremount and Morgantti successfully won the SWWTP contract. To construct and operate the plant, these two main companies which represented the private partner, formed a consortium joint venture (see Figure 3.4). Together, they then established the Samra Procurement and Construction Company- SPC (or Samra Plant Consortium) to take the role of the day-to-day construction, operation and management processes of the project.
Table 3.3: Partners involved in the SWWTP and their contribution

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Identity</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Public Partner (Jordan)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jordan Ministry of Water and Irrigation (MWI)</td>
<td>Parent-partner; Jordan</td>
<td>Participated US$ 14 million</td>
</tr>
<tr>
<td>The Programme Management Unit (PMU) within the MWI</td>
<td>Partner; Jordan</td>
<td>Semi-autonomous unit in the MWI; Managing the project</td>
</tr>
<tr>
<td>The Water Sector Auditing Unit (WSAU)</td>
<td>Participant; Jordan</td>
<td>Monitor the performance of public and private water utilities in Jordan</td>
</tr>
<tr>
<td>Water Authority of Jordan (WAJ)</td>
<td>Participant; Jordan</td>
<td>Management of water resources in Jordan</td>
</tr>
<tr>
<td>Jordan Valley Authority (JVA)</td>
<td>Participant; Jordan</td>
<td>Management of water resources in Jordan Valley</td>
</tr>
<tr>
<td>Engicon</td>
<td>Participant; Jordan</td>
<td>A consulting firm for the MWI; Also, provided engineering services for the construction works.</td>
</tr>
<tr>
<td>SWECO</td>
<td>Participant; Sweden</td>
<td>Water, natural resources and environment experts. Provided consultation services to the MWI</td>
</tr>
<tr>
<td>The Private Partner (Multi-national)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samra Plant Consortium (SPC)</td>
<td>Parent-partner; Consortium</td>
<td>Participated US$ 17 million</td>
</tr>
<tr>
<td>Infilco Degremont</td>
<td>The Implementing Partner; France</td>
<td>The project’s designer. Also, supervised the electrical and the mechanical major works</td>
</tr>
<tr>
<td>Morganti Group</td>
<td>The Implementing Partner; USA</td>
<td>Provided the civil construction processes, equipment and civil works</td>
</tr>
<tr>
<td>Suez Environment (SE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ondeo Services (OS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Consortium led by the Arab Bank (Arab Bank Consortium- ABC), consisted of: Arab Bank; Housing Bank for Trade &amp; Finance; Jordan-Kuwait Bank; Arab Banking Corporation; HSBC; Export &amp; Finance Bank; Industrial Development Bank; Jordan Bank for Investment &amp; Finance; Arab Investment Bank; and, Social Security Corporation</td>
<td>Participant; Domestic, regional &amp; international</td>
<td>Participated US$ 60 million of the total cost of the project</td>
</tr>
<tr>
<td>The Swedish International Development Agency (SIDA)</td>
<td>Participant; Overseas</td>
<td>Provided the financial and technical assistance during design, construction and 18 months of operation</td>
</tr>
<tr>
<td>Seweiz Company (SC)</td>
<td>Participant; France</td>
<td>Managed the project’s contract/agreement</td>
</tr>
<tr>
<td>The United States Agency for International Development (USAID)</td>
<td>Participant; International</td>
<td>Financial participated (US$ 78 million as a grant)</td>
</tr>
</tbody>
</table>

On the public side of the partnership, a Program Management Unit (PMU) was originally established by the MWI to serve as a management tool to assist the ministry, the Water Authority of Jordan (WAJ) and the Jordan Valley Authority (JVA)\(^{36}\) in various strategic activities. Examples of these activities are the development of the Jordan Water Strategy (2009-20012) and its related action plans, and the overall revision of other related water industry legislations and strategies of the water sector in Jordan.

\(^{36}\) The WAJ and JVA are public sector establishments that are structurally and functionally related to the MWI.
After the SWWTP came into existence, the PMU was assigned the role of overseeing and managing this project, representing the public partner, despite the fact that the unit was involved in the project from the outset. The PMU had participated in preparing the feasibility studies of the project and currently assisting the MWI, WAJ and JVA in the preparation and follow up of the project’s agreement and tendering procedures, and in negotiating with the strategic partners and the sub-contractors.

![Figure 3.4: The SWWTP structure](image)

Again, the current research is focused on the ‘managerial entities’ that are directly involved in the day-to-day management of the project. In the SWWTP, the PMU (and its relationship with the MWI), and the SPC (and its relationship with Infilco-Degremont and Morganti) are the focus of this research.

### 3.2.3 Accessing Organisations and Informants

A preliminary screening process of PPP projects was conducted by the current researcher in Jordan in the early stages of the commencement of this research, concluded that three potential PPP projects were considered as the most appropriate to
meet the purposes and requirements of the current research. That is to research PPPs that are in a more advanced stage of development (the implementation phase). These were: The Jordan Education Initiative (JEI); Samra Waste Water Treatment Plant (SWWTP); and, Queen Alia International Airport (QAIA). It was not possible to include the other remaining PPP projects (see Table 2.7) as they were in very earlier stages of development, and therefore, they were not deemed appropriate for the current research. Accessing the JEI was not possible as the initiative was deferred in the later stages of its development, and most of the participants were not available during the data collection of this research. As a result, SWWTP and QAIA were selected as case study organisations for the present research within the constraints of accessibility, convenience and appropriateness (see also the previous section on case study design). All the same, acquiring access to the selected case study organisations was smoothly obtained, as the targeted study participants are the managers of their organisations as explained below.

Gaining access to specific interviewees within the case study organisations was achieved by using several approaches. First, the researcher had established network connections and informal and formal relations with those involved in the management of these projects since 2007, since exploring the feasibility and significance of the research project. These relations were re-inforced through later communication with a number of the study informants before, during, and after, the data collection period through several visits to them at their workplaces. Second, not being employed in any of the projects researched and being based overseas during the period of conducting this research, has encouraged the study informants to perceive this research project positively, and resulted in them being more open to the researcher and the research issues discussed. Third, the study informants were senior managerial level employees in their organisations, and this made it easier to obtain approvals for access when needed. Fourth, a detailed information sheet, along with a letter asking for access permission and consent form were prepared and sent to the study informants prior to access to introduce them to the objective of the research and the nature of their involvement (see Appendices 3.2, 3.4 and 3.5). Fifth, the process of refining the interview questions gave the study informants the opportunity to have input in the research design, and hence increased their willingness to engage in the research. This process also assisted in identifying other potential participants (referred by those who had participated in
refining the interview questions). Sixth, and finally, conducting this research in Jordan had the advantage of political and social openness where research permits are relatively easy to obtain relative to other Middle East countries. However, formal approvals were sought and obtained whenever required from the related authorities, following prescribed official procedures.

3.2.4 Developing and Refining the Interview Questions

In explaining the rationale for using a qualitative research approach, Creswell (1998) stated that because of the limited scientific knowledge on a subject matter, variables cannot be identified and concrete, and well-established PPP theories or models are not yet available. Subsequently, the interview questions for the current research were drawn from the research questions that were concluded from the gaps identified in the literature reviewed on PPPs, IORs and IOC. From this, a preliminary list of interview questions was developed.

To ensure the validity, relevance and trustworthiness of the interview questions (see for example, Denzin & Lincoln, 2003), it was intended to conduct a focus group that involves a number of potential study informants. However, setting up an open, face-to-face focus group session was not possible for various reasons. It was very difficult to coordinate participants from public and private organisations across the two projects, for a particular time and place to meet, partially due to work commitments. Most importantly, responses obtained from the majority of those selected participants indicated that in a public forum, they may only give general responses about the issues to be discussed, due to the sensitivity of the issues. Some participants commented that their fellow counterparts may deliberately avoid addressing critical issues by focussing on subsidiary, superficial issues instead. Others anticipated that such a ‘meeting’, for the same reason, would only be ‘decorative’ and participants would only show decorum to their fellow counterparts and consequently, critical issues would not be deeply discussed. Consequently, an open, face-to-face focus group was not deemed feasible. Madriz (2003) suggested avoiding focus groups in situations where participants may not feel comfortable opening up or expressing and presenting their views in front of each other. Instead, the convergent-type interviewing technique was selected and utilised to refine the interview questions.
**Utilising Convergent Interviewing in Refining the Interview Questions**

Convergent interviewing was originally designed to assist in eliminating the researcher’s potential bias in the data gathering process. The intention was to allow the respondents to identify salient points that could be tested in the subsequent interviews. Through the use of a limited number of interviews with selected experts in the field of study, convergent interviewing allows questions to be refined and developed after each interview. The aim is to ‘converge’ on salient issues that are considered to be of particular importance to the research (Dick, 1990). Further, using convergent interviews is the most appropriate in situations where the researcher is attempting to obtain objective information about a particular phenomenon, through minimising and eliminating bias that may possibly result from the interviewer and/or the interviewee. However, this technique requires the researcher to have a considerable prior knowledge of the subject matter. Additionally, one of the most obvious limitations of using this technique is that it needs to be used to complement other methods as case studies and focus groups.

Considering the difficulties of setting up a live focus group for the reasons mentioned above, convergent-type interviews, supported by use of electronic communication media (i.e. fax, email and websites) to refine the preliminary interview questions, was deemed the most appropriate approach. Using this technique assisted the researcher in obtaining more detailed and honest responses. It also had the advantage of ensuring privacy and confidentiality of communication between the researcher and the participants, and by being convenient in terms of distance, time efficiency, rate of return, and the ability to follow up important comments and suggestions by two-way communication. Using electronic media for communication was also advantageous in obtaining written responses that were easily reviewed and followed up, and at the same time, was very useful in identifying the willingness of the potential participants to further participate in conducting later in-depth, face-to-face interviews. It also gave the participants more flexibility of response time. Further, using this method / technique assisted the researcher in identifying other potential participants which were referred by the respondents (e.g. snowballing technique). At the same time, this technique was very helpful in introducing the research objectives to the potential participants in a written and discrete communication style.
Using this technique, however, had the disadvantage of eliminating face-to-face interaction and the opportunity to read the nonverbal cues and behaviours of the respondents in a focus group setting. What was considered to be most important for this research was the respondents’ reflection on their own lived experiences and perceptions (e.g. what) and managing their organisations (e.g. how). As confirmed by Fontana and Frey (2003) “the focus of interviews is [increasingly] moving to encompass the hows of people’s lives (the constructive work involved in producing order in everyday life) as well as the traditional what (the activities of everyday life)” (p. 62). To obtain the maximum value of this method, and to overcome the shortcomings of the absence of ‘face-to-face interaction’ among participants in a focus group setting, follow-up communication between the researcher and the respondents was initiated, making use of the inputs (i.e. comments) provided by other participants in a continuous process of refining the interview questions.

3.2.5 Finalising the Interview Instrument

As a result of the process detailed above, a list of open-ended interview questions was developed in English by the researcher based on the literature reviewed. To ensure their relevancy, this list of questions was then sent by email to all potential participants along with the objectives of the study and a translated Arabic version of the interview questions (a total of 24 participants were asked to participate, representing senior level management employees across the two case organisations). Prospective participants were asked to give feedback about the appropriateness and the relevance of the interview questions and were asked to give their suggestions for improvement. The majority of those who responded and provided their feedback (a total of 14 respondents) viewed the interview questions positively and confirmed their relevance and appropriateness to address the subject matter, with suggestions provided to make slight changes to some of the interview questions.

The suggestions were incorporated into the final version. Pretesting of the interview questions for linguistic equivalence was then undertaken. The interview instrument was translated into Arabic by the researcher and then back-translated into English by an accredited translator to ensure accuracy and equivalence (see Appendices 3.6 and 3.7 for English and Arabic version of the interview questions). As a result of this process, a
final version of the interview questions was developed and used later in conducting one-on-one, in-depth interview sessions.

### 3.2.6 Interviewing Technique

The purpose of conducting interviews is to “obtain a rich, in-depth experiential account of an event or episode in the life of the respondents” (Fontana & Frey, 2003, p. 63). By being open to new meanings and perspectives, it has been said that researchers can confidently interview in many different domains: about religious beliefs, family life or even about fraternity behaviour (Robin & Robin, 1995). Qualitative interviewing, as such, encompasses a wide range of ways and approaches of questioning. Robin and Robin (1995) confirmed that interviews vary according to the degree of emphasis on culture, the nature of the research domain and the information sought. According to these researchers, “how we interview, depends, in part, on what it is we are trying to hear” (p. 19). Likewise, Fontana and Frey (2000) also stated that various types of research are best matched with particular interview style. For the current research particularly, interviewing representatives from both sides of the partnership, was important to obtain a more comprehensive picture about their perceptions and involvement in the partnership process (Weihe, 2008). Weihe, (2008) contended that doing so is “a novel approach to PPP research” (p. 154).

A semi-structured interview technique was selected for this study. The difference between structured and unstructured interviewing, as stated by Fontana and Frey (2003), is that “the former aims at capturing precise data of a codable nature in order to explain behaviour within pre-established categories, whereas the latter attempts to understand the complex behaviour of members of society without imposing any priori categorisation that may limit the field of inquiry” (p. 75). Additionally, in structured interviews, the interviewer asks all participants the same set of pre-established questions with a limited set of response space, and usually there is little room for variations in responses (Fontana & Frey, 2003). In unstructured interviews, however, the researcher suggests the subject for discussion but has few specific questions in mind. The interviewee is given the ‘freedom’ to answer a question in any way he or she likes (Robin & Robin, 1995). Given its qualitative nature, the unstructured interview type can provide more breadth of data than any other type. Conducting semi-structured
interviews involves the interviewer introducing “the topic, then guides the discussion by asking specific questions” (Robin & Robin, 1995, p. 5). The interviewer has a predetermined list of questions to be asked and answered, but the order of the issues considered can be flexible (Denscombe, 1998).

In evaluating the advantages and disadvantages of each interview technique, semi-structured interview protocol was deemed to be the most appropriate to suit the objectives of the current research. This technique was used because it can provide a general guide to the areas to be covered during the interview, and therefore, ensure comprehensive coverage of the issues, within an informal setting. In addition, it is argued that using this technique is the most appropriate in situations where the researcher knows “enough about the field of enquiry to develop questions about the topic in advance of interviewing, but not enough to be able to anticipate the answers” (Morse & Richards, 2002, p. 94) as is the case in the current research. As such, participants were asked questions about the same issues and were given sufficient time to express their views and perceptions on these issues in a less structured format. Prompting questions were used occasionally for some participants when required to seek further detail or to re-inforce or support their argument about certain important issues.

3.3 DATA COLLECTION AND ANALYSIS

3.3.1 Interview Procedure

All senior managerial level employees in the organisations involved in each PPP project were targeted for this research as the study informants. A total of 21 interviews were conducted (out of 24 targeted participants which represented all senior level managers in the researched organisations; resulting in a total of 10 and 11 interviews were conducted in Studies 1 and 2, respectively)\(^{37}\). Face-to-face, open-ended interviews were conducted at the organisations’ workplaces in Jordan between September 2009 and February 2010. The interviews averaged 62 minutes. The shortest interview was 52 minutes and the longest interview was 89 minutes. Participants from both the public and private sector organisations were mostly interviewed in a mixed mode of Arabic and

\(^{37}\text{The remaining 3 potential participants were unavailable during the period of data collection.}\)
English, with most of the interviewees having a good level of English competency. The remaining interviews were conducted either in Arabic or in English. The interviews were tape-recorded, transcribed and sent back to the participants (upon previous arrangements), following transcription to control possible interviewer bias and to ensure interviewee agreement with the transcribed comments.

The interviews were conducted at the participant’s workplaces, in a private office, either their own or borrowed. The researcher opened each interview by explaining the aims of the research, provided them with a Consent Form and an Information Sheet (see Appendices 3.2 & 3.4). These included their consent to participate in the study and details of the research, the research supervisory team, and contact details for any complaints, in accordance with Griffith University’s Human Research Ethical Requirements. The participants were provided with a confirmation that their identity would be kept confidential. Therefore, to ensure anonymity of the participants, and to match their different categories across the two cases, a coding system was used instead of the participants’ real name (see Appendix 3.3).

3.3.2 The Study Participants

The study informants are senior managers in their organisations, who are responsible for the management of their PPP projects, including day-to-day managerial, technical, operational and financial aspects of the project. These managers are authorised to take critical decisions on behalf of their organisations. These decisions have significant impact on the direction of their projects, and consequently, the success or failure of their PPP projects.

The PPP project managers who have participated in this research, have held senior managerial positions in their project organisations during the data collection phase of this research. Examples of the position titles they held were: Chief Executive Officer (CEO), General Manager (GM), Chairman, Company Head, Director (i.e. Project Director, Acting Director, Regional Director, Department Director, Associate Director), Senior Manager, Corporate Development Coordinator and, Head of Department (HOD).
A coding system for the study informants was used to relate the participants to their context (the project in which they work and the organisation’s sector) (see Table 3.4). For example, the code $S2.5/Pc$ represents participant number five, in study two (SWWTP), representing the public sector partner ($Pc$). The same coding applies to the rest of the study participants.

**Table 3.4: Distribution of the study informants by organisation and partnership representation**

<table>
<thead>
<tr>
<th>Case</th>
<th>Public Partner</th>
<th>Private Partner</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1 (QAIA)</td>
<td>S1.1/Pc; S1.2/Pc; S1.3/Pc; S1.4/Pc; S1.5/Pc</td>
<td>S1.6/Pt; S1.7/Pt; S1.8/Pt; S1.9/Pt; S1.10/Pt; S1.11/Pt</td>
<td>11</td>
</tr>
<tr>
<td>Study 2 (SWWTP)</td>
<td>S2.1/Pc; S2.2/Pc; S2.3/Pc; S2.4/Pc; S2.5/Pc</td>
<td>S2.6/Pt; S2.7/Pt; S2.8/Pt; S2.9/Pt; S2.10/Pt</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
</tbody>
</table>

Key: $S$=Study;  $S1$=Study One;  $S1.1$=Study One, Participant One;  $S1.1/Pc$= Study One, Participant One, Public Sector;  $S2.1/Pt$= Study Two, Participant One, Private Sector .. etc.

A total of 21 interviewees participated in this study; 11 employees participated in Study One (QAIA) and 10 in Study Two (SWWTP). Out of the total of 21 employees who participated in the study, 10 participants represented the public sector partner and 11 participants represented the private sector partner across the two case study organisations (Table 3.4).

**The experience of the study participants**

Table 3.5 shows the previous and current experience that the study participants have in the respective projects, across the two cases from the public and private sectors. It can be noted that all participants had only minimal experience in managing similar projects in the past (an average of 7.6 years), as well as in the current management of their projects (an average of 4.1 years). This can be explained by the fact that PPPs have been newly introduced in Jordan as well as internationally, and more time will be required to gain experience in managing PPP projects.

It can also be noted that public sector managers have had a fewer number of years of experience (both previous and in-project) compared to their private sector counterparts (5.6 and 4.2 versus 10.4 and 7.2 respectively). This can also be explained by the fact
that private sector participants had more managerial exposure to similar experiences in similar projects internationally than their public sector counterparts.

Table 3.5: Years of experience of study informants

<table>
<thead>
<tr>
<th>Participant (The Public Partner)</th>
<th>Years of Experience</th>
<th>Participant (The Private Partner)</th>
<th>Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current (In-Project)</td>
<td>Previous</td>
<td>Current (In-Project)</td>
</tr>
<tr>
<td>S1.1/Pc</td>
<td>1</td>
<td>3</td>
<td>S1.6/Pt</td>
</tr>
<tr>
<td>S1.2/Pc</td>
<td>3</td>
<td>9</td>
<td>S1.7/Pt</td>
</tr>
<tr>
<td>S1.3/Pc</td>
<td>2</td>
<td>7</td>
<td>S1.8/Pt</td>
</tr>
<tr>
<td>S1.4/Pc</td>
<td>2</td>
<td>5</td>
<td>S1.9/Pt</td>
</tr>
<tr>
<td>S1.5/Pc</td>
<td>1</td>
<td>4</td>
<td>S1.10/Pt</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>S1.11/Pt</td>
</tr>
<tr>
<td>Sub-average</td>
<td>1.8</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>S2.1/Pc</td>
<td>5</td>
<td>6</td>
<td>S2.6/Pt</td>
</tr>
<tr>
<td>S2.2/Pc</td>
<td>5</td>
<td>6</td>
<td>S2.7/Pt</td>
</tr>
<tr>
<td>S2.3/Pc</td>
<td>4</td>
<td>4</td>
<td>S2.8/Pt</td>
</tr>
<tr>
<td>S2.4/Pc</td>
<td>3</td>
<td>7</td>
<td>S2.9/Pt</td>
</tr>
<tr>
<td>S2.5/Pc</td>
<td>4</td>
<td>5</td>
<td>S2.10/Pt</td>
</tr>
<tr>
<td>Sub-average</td>
<td>4.2</td>
<td>5.6</td>
<td>-</td>
</tr>
<tr>
<td>Average</td>
<td>3.0</td>
<td>5.6</td>
<td>-</td>
</tr>
<tr>
<td>Total Average</td>
<td>In-project experience: 4.1 years</td>
<td>Previous experience: 7.6 years</td>
<td></td>
</tr>
</tbody>
</table>

Finally, the experience gained by participants from both sectors who are involved in the management of the SWWTP is notably more than those who are involved in managing the QAIA project. This is mainly because the SWWTP started the construction stage earlier (in 2004) and entered the operation stage of its lifecycle earlier too (in early 2009). Therefore, its managers have had the opportunity to gain more experience than their counterpart managers of the QAIA, which has only recently started the construction stage (in 2009).

3.3.3 Data Analysis

It is argued that choosing the most appropriate software for data analyses depends on how the researcher expects to go about the analysis and this does not necessarily mean a detailed analytical plan, but having a general sense of the style and approach expected (Weizman, 2003). Data for the current research were primarily obtained from conducting in-depth, semi-structured interviews and accessing documentary data and news releases from websites. Due to the manageable amount of interview data, content
thematic analysis was completed manually for analysis of the interview data and the documentary data, with Leximancer software utilised for data organisation purposes. Data organisation features that Leximancer software provides were employed to aid data analysis processes for this study. The decision to use Leximancer’s data organisation features to assist ‘partially’ in the data organisation processes was because of its ability to search and classify data through the content of collections of textual documents and display the extract information visually to facilitate data analysis processes manually. This tool is also compatible with many other data forms, sources and displays such as information obtained from web sites. Further, Leximancer was easy to use and navigate through collection of data sources.

During the processes of data analysis, persistent efforts were undertaken to particularly ensure the integrity of both theoretical and internal validity issues (as discussed later in this chapter). For each of the two qualitative studies within this thesis, thematic data analysis was undertaken to identify “pattern, processes, commonalities and differences” (Miles & Huberman, 1994, p.9), and to find the dominant and less dominant themes that represented the informants’ beliefs, attitudes, perceptions and sentiments. One advantage of using thematic analysis is the direct representation of such perceptions, experiences and beliefs from the participants’ own points of view than the views of so-called experts and observers. Another advantage is that some experiences, sentiments and beliefs may not be able to be expressed nor captured using a survey and question and answer format, but may emerge and captured by qualitative research approaches. However, the researcher is aware of the pitfalls of thematic analysis in the interpretation of participants’ comments, the possibility of biased preconception or predisposition or reduction of data in a frequency-counting exercise. Nevertheless, analysis relied upon the researcher’s accuracy when dealing with and managing bulks of data in the analysis process and misinterpretations, omissions and duplications are feasible, and care was taken at all stages to avoid such challenges as explained later in this chapter.

Procedurally, data were coded according to the themes identified in the literature review and refined further by the data analysis processes. All the interviews were then examined based on these themes. Themes were then given codes according to their relevance, supported by, and linked to their respective interviewees’ quotes. Emerging themes were then categorised in groups based on their relatedness. This process
concluded with major themes, sub-times, frequency and percentage of mentions for each theme. This information was then organised and displayed in tables. To facilitate making comparisons between the perceptions of the public and private partner managers across the two case study organisations, the frequency and percentage of citation (as per each organisation/partner), and the total percentage of interviewees citing a theme were displayed in a table that summarises the study findings for each research question/issue. Key findings were given sequential numbers in the order they appear, linking them to the theoretical framework they relate to (i.e. PPP, IORs and IOC). Peer review strategies were then applied by referring the findings to experts in the field for verification. This process is explained further in Chapter 4.

3.4 VALIDITY, RELIABILITY AND LIMITATIONS

3.4.1 Validity and Reliability Issues

Validity in qualitative research refers to the plausibility, credibility, trustworthiness, authenticity and defensibility of findings (Miles & Huberman, 1994). Reliability in turn, refers to the degree of consistency in measures used and whether these measures are free of random error and able to measure the concepts they are originally intended to measure. It also enables other researchers to repeat the study and obtain similar findings (i.e. stability and replicatability). Validity and reliability measures are very important to ensure the quality, rigour and integrity of the research. A study conducted by Aguinis et al. (2009), using content analysis of 193 articles published in Organisation Research Methods (ORM) between 1998 to 2007, showed that validity and reliability were the top two most popular topics in qualitative research measurement during the 10-year period (40% and 23% respectively).

However, the approach to applying validity and reliability concepts to qualitative research still lacks agreement among many scholars in this field of research. In fact, most of the argument among researchers is focused on the extent to which the research process is neutral, objective and unbiased. Lincoln and Guba (1985), for example, asserted that reliability and validity do not apply in qualitative inquiry in the same way as they do in quantitative research. Morse and Richards (2002), however, argued that
the rigour and the integrity of the qualitative type of research can only be achieved by asking the right research questions, ensuring appropriate research design, extracting trustworthy data, building solid theory and following sound verifying processes. As such, it can be argued that the quality of the decisions taken by the researcher in the research design, processes and application stages ensures (or otherwise) the rigour and consistency of the research undertaken.

To ensure that possible bias is reduced to the minimum, several cross-checks and built-in strategies were employed in the design and the implementation stages of the current research. In the design stage, triangulation of the interview questions was established through two or more carefully worded questions that addressed the subject matter from different views (an example are interview questions 2 and 4; see Appendix 3.6). Occasionally during the interviews, some of the interview questions were explained in Arabic or in English, as the case might be useful to utilise the full account of the information given. In addition, using two externally heterogeneous and internally homogeneous case studies had demonstrated considering alternative perspectives and provided the opportunity for the examination of evidence from different angles and, at the same time, had provided a base for comparison (see also, Eriksson & Kovalainen, 2008).

In refining the interview questions, applying convergent interviewing had advantages in ensuring the procurement of valid and reliable findings (see for example, Dick, 1990). This interviewing technique also incorporated in-built procedures to minimise researcher bias, in which the interviewer was prompted to challenge and disprove responses provided by the respondents during the course of two-way communication with them to refine the interview questions (see for example, Weaven, 2004). The interview transcripts were returned to the majority of the interviewees (upon their request) for further verification and proof-reading to ensure the accuracy of the transcribed material (see also, Eriksson & Kovalainen, 2008).

To attain the maximum levels of reliability of the research findings, the researcher strictly adhered to an organised and structured approach in recording, transcribing, writing, examining and interpreting the interview data as suggested by Dick (1990), as well as in the general design of this research. Other cross-checking strategies applied to
the findings were sought through other academic and practitioner experts in the field. Finally, following Eisenhardt and Graebner’s (2007) suggestion to limit the potential bias in interviews, this study utilised highly knowledgeable informants from senior level management of the partnering organisations who were assumed be able to view the focal phenomenon from diverse perspectives.

In qualitative research inquiry, there are different types of validity. Below is a description of each and the tactics that have been employed for the current research to ensure that the requirements of each type were met.

**Descriptive validity** is used to ensure the accuracy of the reported descriptive information is achieved by the presence of more than one researcher in conducting interviews. In the current research, it was not possible to involve other researchers when the interviews were conducted as the researcher had anticipated that this would adversely affect the interview atmosphere and most probably hinder the interviewees from being open and giving honest responses. Alternatively, the interviews were tape recorded and later transcribed and fed back to the interviewees in hard copy to ensure accurate reflection of the information provided by them was achieved.

**Interpretive validity** refers to the extent to which the interviewee’s feelings, thoughts and experiences are accurately reported. For this research, the interviewees were encouraged to elaborate on their perceptions, experiences and views by asking them to comment on other participants’ experiences and views obtained from previously conducted interviews. In addition, the interviewees were asked to give practical/factual examples, whenever possible, from their own lived experiences to support their views and perceptions.

**Theoretical validity** refers to the extent to which the findings explain the phenomenon under study (Maxwell, 1992). The triangulation and peer review strategies were used to verify the findings of this study by referring to academics who are considered experts in this field of research (e.g. Robyn Keast in 2010, Paul Couchman 2008-2011).

**Internal validity** means the extent to which the procedure of the research design enables the researcher to draw unambiguous conclusions for the research results. Vaus (2001)
argued that the way in which the study is set up, can outline an alternative explanations for the findings. He also argued that, “by developing a full, well-rounded causal account, case studies can achieve high internal validity” (Vaus, 2001, p. 234). The current research followed an idiographic approach (versus a nomothetic approach) that demonstrates the uniqueness of the chosen cases to ensure full and contextualised understanding of each is achieved (see also, Eriksson & Kovalainen, 2008), and the selection of cases and sampling technique used in this study.

*External validity* refers to the extent to which results from a study can be generalised beyond the particular study. There are two types of generalisation: statistical and theoretical. The former is achieved by using representative random samples, whereas the latter involves generalising from a study to a theory, which Yin (2003) called analytic generalisability. In that sense, case study designs are fundamentally theoretical. They are not designed to provide a basis for making statistically valid generalisation beyond that particular case; they do not strive for this type of external validity. However, to help strengthen external validity, the current research involved the researcher, academic supervisors, as well as academics that are considered experts in this field of research, in refining the findings to gain different insights from multiple perspectives.

In conclusion, and based on the above discussion, it would be unrealistic to suggest that applying qualitative research in this study should automatically result in value-free errors in process and findings. Qualitative research is not fundamentally striving to achieve this. It can be argued that qualitative research has ‘built-in’ characteristics to promote the authentic aspects of the data collected from ‘genuine’ informants in the field of study. Moreover, generalisability of findings can often be achieved by further research in the field of this study.

### 3.4.2 Methodological Limitations

Due to time and resource constraints, as well as, access difficulties, first, it was not possible to consider the views and perceptions of the stakeholders (e.g. civil society organisations, institutions, unions .. etc), who are described as secondary or peripheral
partners and viewed by many scholars to have a substantial impact on PPPs.\textsuperscript{38} Examining the impact of stakeholders on the way the implementation phase of a PPP is managed would exclusively need a separate research effort of its own. Second, the limited number of the cases selected for the current research was subject to the availability of PPP projects that have at least entered one of the two stages of the implementation phase. Third, the current research had adopted the perceptions of the study participants as a main determinant to the effectiveness of the management practices in the studied projects. Other determinants of the effectiveness of PPP management practices, such as considering client satisfaction and public opinion and values, were not possible for the current research, mainly due to the time constraint, and these require a separate research effort of their own. Fourth, it was not possible to use the full potential of the documented and archived material available to the researched projects due to confidentiality issues. This was mainly explained in that the projects researched are still developing and their policies and contract agreements have strictly mandated that detailed information about these projects should not be disclosed to any party outside project agreement.

Finally, conducting some of the interviews in Arabic and the majority of the interviews in a mixed mode of Arabic and English, posed some challenges in that using dual language requires back-translating into English and precise verification for accuracy. The process of language translation and back-translation, no matter how precise, might involve little permissible errors because of this process. However, to minimise the adverse effect of using dual language, prior to data analysis, interview transcripts were translated from Arabic into English by the researcher (a native Arabic speaker) and back-translated by a second accredited Arabic-English translator, to ensure the accuracy of the translated material. Although a standardised interview instrument was used, issues not previously identified during the interviews were followed up by the researcher with further questions either by email or phone.

\textsuperscript{38} Nevertheless, the initial efforts to include stakeholders in the current research (such as the Ministry of Environment, the Consumer Protection Association, the Farmers Union) has revealed that their involvement in the projects researched was very minimal, and consequently, not much information was available to be collected and employed in the current research.
CHAPTER 3 SUMMARY

Chapter 3 detailed the methods used in this research to answer the current research questions and achieve the objectives. This research utilised an exploratory, ontologically-oriented, qualitative research design. It entailed analysis of two case studies of PPP infrastructure projects in Jordan. Data were collected from 21 open-ended, in-depth and semi-structured interviews with selected informants at the senior managerial level representing different partnering organisations. Content thematic analysis utilising Leximancer was used to analyse interview data and documentary data.

The contextual aspects of the methodology used in the present research were provided. Research design, including using case study approach, accessing informants, and refining the interview instrument was presented in this chapter. Data collection techniques and procedures were also discussed. The chapter concluded with a discussion of the issues of validity, reliability and limitations relating to the current research.

Chapter 4 presents the study findings from the two case study organisations in Jordan. It provides answers to the research questions. Key findings on the management of public private partnerships (PPPs), inter-organisational relationships (IORs) and inter-organisational culture (IOC) are presented. It wraps up with a conclusion and a summary at the end of the chapter.
CHAPTER 4: FINDINGS

INTRODUCTION

In recent times, the infrastructure sector in Jordan has witnessed vast and massive development in terms of both the number of projects and the amount of capital investment. This is particularly due to the need and significance for these projects for developing Jordan’s economy. Since the year 2000, the Government of Jordan (GoJ) has announced more than 35 public private partnership (PPP) initiatives for projects in infrastructure and other services sectors.

As concluded from the literature reviewed on PPPs, Inter-organisational Relationships (IORs) and Inter-organisational Culture (IOC), an in-depth understanding of the micro-management aspects of managing PPP projects is needed for the effective management of PPPs. This chapter presents the findings from two Jordanian case study organisations to provide such understanding and develop the research argument. The first case study organisation is the Queen Alia International Airport (QAIA) and the second case study is the Samra Waste Water Treatment Plant (SWWTP).

This chapter consists of three sections (see Figure 4.1). The first section provides answers to the research questions on the PPP management framework. The second section presents answers to the research questions on IORs. Answers to the research questions on the IOC are provided in section three.

Key findings are presented and summarised in each major section, and an overall summary of the research findings is provided at the end of the chapter. The theoretical frameworks that were utilised in this research are numbered from 1 to 3. The PPP framework is given Number (1). The IORs framework is given Number (2). The IOC framework is given Number (3). Key findings are given sequential numbers in the order they appear, following an alpha-numeric numbering system to allow linking of findings to their theoretical frameworks. For example, KF2.4, means key finding number four in framework two (the IORs).
Figure 4.1: Chapter 4 structure

Major themes and sub-themes that emerged from the data are displayed in a table at the beginning of each section. To facilitate making comparisons between the perceptions of the public and private partner managers across the two case study organisations, the frequency of citation (percentage) for each theme is displayed in the same table that summarises the study findings for each research question/issue. For example, the figure ‘10’ in Table 4.1, means that 10% of the total number of interviewees who have participated in this study (e.g. 2 out of 21 interviewees), representing the public partner in the SWWTP mentioned the theme ‘developing and training employees’. The same applies to the figure ‘5’ in the table. The figure ‘33’ in Table 4.1, means that 33% of the total number of interviewees who have participated in this study (e.g. 7 out of 21 interviewees), representing the private partner in the SWWTP mentioned the theme ‘developing and training employees’. The same applies to the figure ‘19’ in the table. The figures ‘10’ and ‘33’ are then added to total ‘43’ which is the total percentage of the interviewees participating in the study from the public and private partners in the SWWTP who mentioned the theme ‘developing and training employees’. The same

Likewise, the figures 5%, 33%, 19%, 43% 24% and 67% in Table 4.1 represent 1, 7, 4, 9, 5 and 14 interviewees respectively (out of 21 interviewees who have participated in the study).
applies to the figure ‘24’ in the table. Finally, the figure ‘67’ is a sum of the total percentage of interviewees participating in this study (e.g. 14 out of 21 interviewees) from both public and private partners, across the two case study organisations who mentioned the theme ‘developing and training employees’. That is by adding up the figures ‘43’ and ‘24’ a total of ‘67’ shown in Table 4.1.

Table 4.1: Example of the way the study findings are displayed

<table>
<thead>
<tr>
<th>Q. 1: PPP Effective Human Resource Management (HRM) Practices</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>1 Developing and training employees</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

The study findings are presented in the next three sections. Key findings are presented in association with the relevant research questions and the theoretical framework to which they relate. The first section presents findings for RQ.1 (the management of the implementation phase of PPPs in Jordan), which is located within the PPP management framework. The second section presents findings for RQ.2 (the nature and the management of IORs), which is located within the IORs framework. The third section presents findings for RQ.3 (the compatibility, management and characteristics of culture), which is located within the IOC framework.

4.1 FINDINGS RELATED TO THE PPP MANAGEMENT FRAMEWORK

The PPP management framework involves addressing and answering Research Question 1:

RQ.1: How is the implementation phase of Jordanian Public Private Partnerships (PPPs) managed?

The PPP management involves effective practices for managing PPPs, difficulties that face the management of PPPs, institutional differences between partners, management expertise required to manage PPPs, and monitoring and controlling mechanisms used to oversee the progress of PPPs.
4.1.1 PPP Effective Management Practices

The following provides responses for Research Question 1.a:

**RQ.1.a: What are effective practices for managing the implementation phase of PPPs in Jordan?**

The interviewees’ responses to this question were grouped into five categories (in descending order as to the frequency of citation), and are shown in Table 4.2. These were: practices related to the management of human resources (67%); working closely with the other partner (62%); the project contract / agreement (62%); monitoring the progress of the project (52%); and, prior knowledge/experience in handling PPP issues (35%).

<table>
<thead>
<tr>
<th>Q. 1.a: The Effective PPP Management Practices</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resource management (HRM) practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Developing and training employees</td>
<td>10 5</td>
<td>33 19</td>
</tr>
<tr>
<td>1.2 Recruiting employees locally</td>
<td>0 5</td>
<td>14 19</td>
</tr>
<tr>
<td>1.3 Improving employees working conditions</td>
<td>0 0</td>
<td>24 10</td>
</tr>
<tr>
<td>1.4 Promoting qualified nationals to prominent positions</td>
<td>0 0</td>
<td>10 14</td>
</tr>
<tr>
<td>Working closely with the other partner</td>
<td>14 10</td>
<td>24 14</td>
</tr>
<tr>
<td>The project contract / agreement</td>
<td>10 14</td>
<td>24 14</td>
</tr>
<tr>
<td>Monitoring the progress of the project</td>
<td>14 10</td>
<td>14 14</td>
</tr>
<tr>
<td>4.1 Employing engineers, consultants and advisors to monitor progress</td>
<td>5 14</td>
<td>5 14</td>
</tr>
<tr>
<td>4.2 Well-established data-base system</td>
<td>10 0</td>
<td>14 10</td>
</tr>
<tr>
<td>4.3 Well-established monitoring mechanisms</td>
<td>5 5</td>
<td>14 5</td>
</tr>
<tr>
<td>4.4 Employing staff on the site to monitor and report progress</td>
<td>0 14</td>
<td>0 10</td>
</tr>
<tr>
<td>Prior knowledge/experience in handling PPP issues</td>
<td>10 5</td>
<td>10 10</td>
</tr>
</tbody>
</table>

**Effective human resource management (HRM) practices in managing PPPs**

It was found that certain human resource management practices were considered by the study interviewees as particularly important in managing PPPs. As perceived by the PPP project managers, the development and training of staff was amongst the most
effective human resource management practice in managing PPPs (cited by 67% of the interviewees). This was pursued through certain strategies such as: recruiting experts from overseas to train the local staff; arranging meetings with them; sending employees overseas to receive training; providing them with extensive training internally; and, conducting orientation programs for the new employees. As shown in Table 4.2, staff development practices were more frequently cited within the private partner organisations than within the public partner organisations (52% versus 15% of citations respectively). It was also a more frequent practice in the SWWTP than in the QAIA (43% versus 24% of citations respectively).

Other human resource management practices that were found to be effective, although less commonly cited by the interviewees were (in descending order as per the frequency of citation): recruiting employees locally (38%); improving employees’ working conditions and improving local staff awareness of health and safety issues (34%); and, promoting qualified nationals to prominent positions (24%).

The importance of developing the skills of the local workforce and offering them effective training about the very different practices and working environment of such PPP projects, was described by one manager as follows:

> You know, the technical and managerial competencies required for such type of projects are essentially different due to their huge size and their degree of technological and managerial sophistication than those of traditional, single-owned projects. For a PPP to be successful, especially those involving foreign investors, it is imperative that the private sector partners are not perceived to be ‘stealing’ national assets. One of the most effective methods to accomplish this is developing the skills of the local talent within the new concession company, promoting qualified nationals to prominent positions and managing/minimising the expat dependence by time (S1.1I/Pt).

It is noted here that the effective human resource management practices shown in Table 4.2 were significantly less cited by the public partner managers compared to their private partner counterparts.

Overall, special attention was given to recruiting, building up and developing the local labour force working in the PPP project. This practice was perceived by the PPP managers as key factor to the successful implementation and management of these
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projects. It is also noted that this was particularly a private partner priority as it was the private party that was responsible for the construction works of the PPP project.

Working closely with the other partner

Working closely with the other partner entailed coordination of activities between partners for a certain course of action which was mostly achieved through establishing coordination committees. This was the second most mentioned theme (62%), with almost identical importance noted by both the public and private partner managers across the two cases. One public partner manager commented:

> In the Coordination Committee meetings, we discuss everything; if things are on line with the requirements, is going as planned or otherwise. You verify, discuss and address everything in details, and you work with them closely, anytime if needed, so that you minimise any possible disputes and you don’t leave things to chance or later misunderstanding. I can tell you: we both enjoy this and find it sometimes a bit of fun. You know, this is a Jordanian way, and found it very useful (S2.2/Pc).

Another private partner manager explained why it was important to work closely with the other partner:

> Working closely with our partners is the best way to keep up our momentum for this sort of long-term projects. Do we have time for it? Not really! But this is part of our work, and we get to do it. It saves us a lot of pain later (S1.8/Pt).

Therefore, both partners agreed that regular interaction with the other partner to discuss progress and coordinate activities was one of the most successful practices in the management of PPP projects.

The project contract / agreement

Participants largely agreed (with 62% of citations) that the detailed project agreement provided them with an important framework that helped them clarifying any misunderstanding. The project’s agreement explained in detail the scope of work given to all parties involved in the project and the duties and responsibilities for each party. One interviewee commented:
Look! This project is a multi-partner, multi-million-dollar project. Everybody is there for a reason. Each has his own role to play in and obligation to hold to. One of the lessons that we learnt out of previous projects, and has proven the most successful way of management, is to stick to the scope of work that is given to you as per the project’s contract/agreement. Everybody involved in this project has to have clear duties and responsibilities; otherwise, things get tangled and mixed up internally and externally, and surely will reflect badly on the relationship between us as partners (S2.4/Pc).

The project agreement was established and agreed upon by all partners involved in the partnership arrangement before the project had commenced. For both the public and private partners, complying with the scope of work given in the agreement and adhering to the role specified in it minimised the possibility of overlap and conflict between them.

**Monitoring the progress of the project**

Methods and techniques used by the PPP managers to monitor the progress of the project was an effective management practice as perceived by managers of the public and private partners across the two case projects (with 52% of the total citations for this theme).

It was found that PPP managers used a variety of project monitoring techniques to ensure that their PPP project progressed as planned. These monitoring techniques included: employing independent engineers (IEs) on site to monitor and report any obstacles to the progress of the project, as well as legal, technical and financial consultants and advisors to help assess the project’s progress (38% citation); putting in place well-established documentation and data-base systems (34% citation); putting in place a well-established monitoring, reporting and controlling system (such as advanced programming techniques, a detailed, continuously updated project plan, establishing internal project management plan (PMP), quality assurance (QC), and quality control (QC) plans) (29% citation); and, having staff on the site to monitor and report the progress of the project to the management (24% citation). Table 4.2 shows the frequency with which these techniques were mentioned by the public and private partner managers.
In the PPP projects, the construction works on the site was one of the important areas on which the whole project rested. Consequently, effective management of the construction works was critical for such projects. Because the construction works were technically sophisticated, employing experts in the field of engineering and construction was an essential but challenging requirement. In the case study organisations therefore, employing what was called independent engineers (IEs) seemed to be a common practice for both sides of the partnership. The IEs were firms that had the technical experience and expertise in certain fields of construction works and were able to offer specialised engineering consultations and services. They played a substantial role in partnership projects that involved technical complications in the design and construction of the PPP projects. As confirmed by one public partner manager:

Having the IEs on board is one of the most important requirements for the success of PPP projects. These engineers ensure if everything goes according to the project design plans and report the progress. They were and still are a great help for us. As you know, this project is highly technically sophisticated. Although we have our own engineers on the site, we still do not have this sort of specialised expertise in the technicalities of the construction works. Also, having own engineers on the site who work hand in hand with those engineers was a good idea. They get along well with each other. They have the same common language. They learn from them. It is a long-term learning process (S1.5/Pc).

Another private partner commented:

Being backed up by the IEs, as well as advisors and consultants in all field of expertise (technical, legal, financial) provide us with a second opinion, but in the first hand. We trust their opinion, as well as our partners do. Besides, the IEs in particular were involved in the design of the project. They know all of its hicks and tricks (S2.4/Pt).

In addition to the IEs, having a well-established data-base, monitoring mechanisms and staff on the construction site were necessary requirements that assisted in the management of the PPP projects. Although mentioned less frequently by the public and private partners across the two cases, the data-base and monitoring systems worked as preventive mechanisms against any possible dispute between partners, and at the same time, assisted in the effective management of the PPP project. A public partner explained:

This is a BOT [Build, Operate and Transfer] type of PPPs. It is a multi-partner, long-term project that goes for more than 25 years. Therefore, you get to have a very well-set documentation and data-record system. We’ve got a system server that stores every piece
of paper by scanning all the paper-work with more than 80 Gigabytes of data related to this project. This system saves us a lot of possible hassles, pain and misinterpretations with different partners involved. It is more than a data-base system. It is a total monitoring system that also helps us to do the follow up of the paperwork and all other stuff. We will need this information even after 22 years when the partner hands over the project to us (S1.2/Pc).

Another private partner commented on the internal procedures that his organisation put in place to monitor the progress of the project, as follows:

We can’t just sit here comfortably in this air-conditioned office and do a ‘remote-monitoring of the every day’s progress. Our own staff are there to observe and report what is happening. We use advanced programming techniques such as CPM [Critical Path Method] to ensure the construction works are in line with the project’s basic and detailed designs. This is an everyday stuff and these techniques are incredibly amazing and make the management of this project much easier (S1.7/Pt).

Because PPP projects are long-term arrangements, putting in place a set of monitoring techniques was a necessity to follow up the progress of the PPP projects.

Prior knowledge/experience in handling PPP issues

One third (35%) of the managers of both the public and private partners, across the two cases have confirmed that previous experience in working in similar projects, particularly overseas, was important in providing them with good knowledge and skills in managing their current PPP projects. This argument was consistent across both sectors, albeit with different foci. For the private partner managers particularly, having prior experience in managing similar projects had proved to be an effective PPP management practice. One private partner manager commented:

Most of our managers had not come to this project empty-handed. They were selected carefully based on their prior experience with similar, and sometimes more sophisticated mega projects overseas. Also, during the course of this project, they have been given the opportunity to meet and work with different people with different backgrounds from outside the country who have an outstanding experience in such projects. This helped us a lot and will add up to our knowledge on how to manage similar local, regional and international projects (S2.10/Pt).

The public partner managers, while in agreement about the significance of prior experience in the management of the current project, referred to the procedures they had
put in place to make up for their lack of experience in managing similar PPP projects. One public partner manager gave the following comment:

For people to work in such multi-partnered projects, they got to have the right qualification and experience. Those who lacked at least one of which, we arranged them an extensive training in Jordan and overseas. We inducted them to the project agreement, offered them materiel to read about this project, arranged them to meet with experts from the Swedish company and with close mentoring by myself, until we made sure that they were prepared to deal with the managerial aspects of this project. I am sure that they are now ready to take this knowledge with them to wherever they go after the completion of this project (S2.5/Pc).

Accordingly, the PPP managers were confident that having previous experience in managing similar PPP projects improved their abilities in managing their current PPP projects more effectively.

A summary of key findings for RQ1.a, which addressed the effective PPP management practices, are presented in Table 4.3. The interviewees’ responses to this research question resulted in five emergent themes, namely: human resource management practices; working closely with the partner; the project agreement; monitoring the progress of the project; and, previous knowledge in managing PPPs. These themes were found to be closely linked to the effective management of PPPs during the implementation phase of the project.

Table 4.3: Summary of key findings for RQ1.a
(Effective PPP management practices)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Finding</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Human resource management (HRM) practices</td>
<td><strong>KF1.1:</strong> A number of human resource management practices were closely related to effective PPP management. Special attention was given by the private partner to recruiting, training and developing local workforce</td>
<td>14 (67%)</td>
</tr>
<tr>
<td>2 Working closely with the other partner</td>
<td><strong>KF1.2:</strong> Working closely with the other partner, a well-detailed project agreement and using effective monitoring mechanisms were effective PPP management practices</td>
<td>13 (62%)</td>
</tr>
<tr>
<td>3 The project agreement</td>
<td></td>
<td>13 (62%)</td>
</tr>
<tr>
<td>4 Monitoring the progress of the project</td>
<td></td>
<td>11 (52%)</td>
</tr>
<tr>
<td>5 Prior knowledge/experience in handling PPP issues</td>
<td><strong>KF1.3:</strong> Having prior experience in managing PPP projects has proved to be an effective PPP management practice</td>
<td>6 (35%)</td>
</tr>
</tbody>
</table>
4.1.2 The Difficulties Facing the Management of PPPs

The following provides responses to Research Question 1.b:

**RQ.1.b: What are the difficulties facing the management of PPPs in Jordan?**

In this section, the discussion focuses on the difficulties that faced the management of the PPP implementation in Jordan that emerged from the data collected from the two case study organisations are discussed. Table 4.4 displays these difficulties, which were organised under two categories: the internal and external management difficulties. The internal management difficulties (that were found to be the most significant as reported by the study participants) included difficulties in the management of human resources and lack of knowledge and experience in managing PPPs. Amongst the external management difficulties, issues of changing circumstances, external pressures and coordination and communication difficulties were the most significant difficulties that faced the management of PPPs that stemmed from external sources.

**Table 4.4: Difficulties in managing PPPs in Jordan**

<table>
<thead>
<tr>
<th>Q. 1.b: The Difficulties in Managing PPPs in Jordan</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal management difficulties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Human resource management difficulties</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>2 Lack of knowledge and experience in managing PPPs</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td><strong>External management difficulties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 The changing circumstances</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>2 External pressures</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>3 Coordination and communication</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

**The internal management difficulties**

With the exception of the private partner managers of the QAIA, difficulties in managing certain PPP issues were reported by the PPP managers as a common problem that they experienced in managing their PPP projects. These difficulties were related to: certain issues in human resource management (58% of citations); knowledge and
experience in PPP management (43% of citations); and, internal organisational and adaptability difficulties (33% of citations).

In the first place, both the public and private partner managers (58% of citations) confirmed that certain issues related to human resources were difficult to manage. Examples of these issues include that managers faced a problem of staff shortages in quantity and quality, especially at the beginning of the project. Managers found difficulties in finding sufficient numbers of employees from the local labour market who had the appropriate qualifications, training and experience to start working immediately in the PPP projects. One manager commented:

> We started the project with a very few number of employees and we needed a larger team to oversee the project. In one point of time during the construction, we were only a team of 12 people, compared to 3000 employees working for the private partner. We had a very hard time and stressful working conditions to cope up with the loads of the work waiting to be done. In the peak working hours of the day, we could hardly find a time for a cup of coffee (S2.2/Pc).

Even those employees who had qualifications that met the working requirement of the PPP projects still needed experience and extensive training to be able to cope with such a different working environment than in the traditional, less sophisticated projects. One manager made the following comment:

> Managing local manpower was for us a challenging problem at the beginning of the project. We could hardly find people working in the project who were well-prepared and oriented to the new ways of doing things from the traditional single-owned projects to multi-partner projects like this one. Definitely, managing this type of projects is completely different from the traditional-type projects (S2.4/Pc).

PPP managers have also experienced difficulties in creating awareness by the local staff of health and safety issues which they considered a necessity for work in such a technologically sophisticated working environment. One private partner manager confirmed:

> The unavailability of the qualified and trained staff to work for the project from the local market, and the absolute lacking of Health and Safety awareness within the local staff were two difficult problems we faced at the start of the project (S1.6/Pt).

The importance of having qualified and experienced staff (in sufficient quality and quantity) to work on the PPP project was one of the necessary requirements for more
effective PPP management. The interviewees agreed that attention should be given to
the management of human resources before the commencement of a PPP project.

Second, the lack of knowledge and experience in managing PPP projects in Jordan was
also one of the hurdles that public partner managers particularly faced in managing their
projects (with 43% of citations). The public partner managers described managing
multi-partner projects as a new way of management with many sophistications
associated with the project’s design and construction, technically and managerially.
This was explained by two interviewees as follows:

Because this project is a new project nationally and regionally, we lacked the knowledge
in managing such projects. We did not have much idea about the best approach of
management to follow. However, we learned day by day how to manage, following the
‘trial-and-error approach’ (S2.3/Pc).

Our main problem was how to manage such sophisticated construction processes of the
project. Frankly, at the beginning we felt like paranoid on how to run this sort of projects
as it is the biggest and the first investment of its kind in the country. The risk of potential
failure made us work day and night to overcome any problem. By time and accumulated
experience we could manage such project with this level of sophistication (S1.2/Pc).

It is noted that the private partner managers did not view the lack of knowledge and
experience with the same level of importance as their public partner counterparts.
Nevertheless, lack of knowledge and experience in managing PPPs was one of the
internal management difficulties that PPP managers confronted during the course of
implementation of their projects.

The external management difficulties

The PPP managers frequently reported certain PPP management difficulties that
emerged from external sources, as a common problem that they confronted in managing
their PPP projects. These difficulties were related to: changing circumstances; external pressures; and, coordination and communication.

The public and private partner managers, across the two cases (66% of citations) confirmed that they were challenged, on frequent occasions, by unexpected circumstances instigated by external forces outside their organisations that necessitated changes to the original design and construction processes of the project (e.g. the increasing demand on services due to large number of people fleeing their countries as a result of the wars in the region). Issuing a Request of Variation Order (RVO) by one partner to make further extensions in the project design, for example, required approval from the other partner. The problem was that most of these RVOs had technical, financial, legal and managerial consequences that required adjustments to the project’s agreement and design plans that required obtaining approvals from many parties involved in the project. One public manager explained:

Our private partner issued us with an RVO suggesting that the space of land granted for him to do the construction is not sufficient enough to accommodate the commercial facilities such as restaurants, shops, etc. This was a problem, because such orders imply financial, technical, managerial and other implications and adjustments. These sorts of orders also require approvals from everywhere, as well as, exhaustive discussions and negotiations with all parties involved. Although, in this specific case, the consortium ended up paying an extra of US$50 million for this expansion in an exchange of our agreement to delay the construction of the project up to 8 months, this took a hell of our and their time and effort (S1.3/Pc).

Nevertheless, the public partner seemed to be less flexible in obtaining approvals for the RVOs issued by their private partner. As confirmed by the managers of both public and private partners, complying with the governmental bureaucratic red-tape and complicated procedures to obtain approvals to these changes was time-consuming and mostly resulted in delays in the construction of the project. One private partner manager commented:

The process of obtaining approvals from our partner [the public] to order spare parts that are urgently needed to the plant, for example, has to go through complicated procedures and usually takes long time and effort to get it done. On many occasions we had to do a lot to convince them [the public] of our genuine need for upgrading the existent facilities or the need for new equipment to build new facilities to cope up with, for example, the increasing volumes of wastewater due to the unexpected large number of immigrants and refugees due to the wars in the region (S2.7/Pt).
A public partner manager confirmed:

Yes, RVOs are freaking hectic issue for us, because it’s always been subject to the availability of the financial funds. When it comes to the changes that imply financial consequences, getting approvals is an exhaustive effort. It usually takes longer time than anticipated. You know such approvals need a decision from higher levels of authority such as the Minister (and may be the Cabinet), the Auditing Bureau, as well as many other parties involved in the project (S1.4/Pc).

Yet, another problem associated with the changes to project design was the absence of an agreed upon plan or mechanism to address and handle these changing situations and consequently the ROVs. A private partner manager commented:

It is all done following the ‘give-and-get’ approach in negotiating and compromising. The party who issues the variation order, has to substantiate it. You get to have good reasons for it and be able to convince them with your proposal (S2.8/Pt).

All the same, issuing an RVO was not limited to one partner. These RVOs required obtaining approvals from the other partner, which was usually difficult to secure in many situations. A public partner stated:

We are also currently considering issuing two variation orders to our private partner. One of these is related to the security requirements at the airport. You know, for us this is a serious matter and needs to be done to the highest possible standards (S1.2/Pc).

It was obvious that the unexpected circumstantial conditions that were caused by external forces needed an agreed upon contingency plan and mechanism established beforehand to deal with these conditions. The absence of such plans and mechanism imposed difficulties to the effective management of the PPP projects.

KF1.6: The unexpected circumstances that imposed changes to the project’s structure with the absence of an agreed upon plan to handle the changing conditions were obstacles in the management

Yet, interviewees indicated that other pressures caused by external sources had substantial impact on the PPP managers mutually across the two project organisations (58% of citations). Examples of these pressures included the lack of understanding of the PPP processes and the need to induct others outside the partnership about the concept of partnership, dealing with too many stakeholders who had different interests in the project or affected by it, and, being exposed to the public and the attraction of these projects nationally and regionally. One public manager summarised these difficulties as follows:
The problem is that not many people outside the partnership understand what BOT projects mean. We often find ourselves in a situation that we have to educate others about the concept to get our things done. We even sometimes got in trouble with the press/media. They look at us as if we are ‘selling the country’! This project is attracting the public eyes nationally and regionally. Others wait to see what this project will come up with. If it proves successful, then it would be a good example for them to follow. Yet another problem we face is the difficulty of dealing with so many stakeholders who have direct or indirect stake in the project, of most of whom we even do not know! You cannot run this project without considering these issues. Can you? (S1.4/Pc).

According to the PPP managers across the two case study organisations, these pressures made the PPP projects more difficult to manage.

**KF1.7: Pressures imposed by external sources had substantial impact on the management of PPP projects**

Finally, PPP managers experienced coordination and communication difficulties in their external relationships mainly due to different views and interests of the partners about what was the right course of action to take (cited 52%). On occasions, these difficulties resulted in delays to the construction works of the project. One private partner manager explained:

Communication difficulties are common daily problems: the project designer is situated in France, the construction company is based in America, our head office is in Athens [Greece] and the project and our public partners are based in Jordan. The least is the differences in the timing zones. Also, the holidays and weekends are not the same (S2.8/Pt).

Coordinating the construction works seemed to be a prominent problem for PPP managers in both projects. For example, the construction process for QAIA was taking place at the same time as the operation of the existing airport. Coordinating these activities was viewed differently by those who had a stake in the process. A private partner manager commented:

Coordination has always been a hectic job. Each party has its own priorities and views of how to do the thing. In the reinstatement works, for example, we preferred to have the whole area delivered to us for our works, while the existing airport management claimed that they could not give out the whole area for construction as this might have disturbed the existing operations of the airport. They could only give it out to us in parts. They can do it. They just did not want to be committed to any more bloody work. We have done a lot to improve the existing facilities of the airport for God sake. Do they appreciate this? (S1.6/Pt).
However, in dealing with the communication and coordination difficulties, PPP partners adopted several approaches to address and manage the above-mentioned difficulties that they confronted during the management of their PPP projects. These approaches are categorised under ‘managing the differences between partners’ as discussed later in this chapter.

A summary of key findings of RQ1.b, which addressed the difficulties that PPP managers experienced in managing their projects is presented in Table 4.5. The interviewees’ responses to this research question resulted in two main categories and five themes. The difficulties that PPP managers confronted in managing their projects were categorised into internal and external management difficulties. Within the first category, two themes emerged, namely: human resource management difficulties; and, lack of knowledge and experience in managing PPPs. Within the second category, three themes emerged. These were: responding to changing circumstances; external pressures; and, coordination and communication difficulties. The emergent themes were found to be closely linked to the management of the implementation phase of PPP projects.

Table 4.5: Summary of the key findings for RQ1.b (PPP management difficulties)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Finding</th>
<th>Citations</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Internal management difficulties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Human resource management difficulties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  | KF1.4: Certain human resource issues, such as staff shortages in quantity and quality, especially at the beginning of the PPP project, were difficult to manage |
| 12 | 58 |
| 1.2 Lack of knowledge and experience in managing PPPs | 

  | KF1.5: Public partner managers lacked sufficient knowledge and experience in managing their PPP projects at the beginning of the project |
| 9 | 43 |
| **2 External management difficulties** |                                                                             |           |       |    |
| 2.1 Responding to the changing circumstances | 

  | KF1.6: The unexpected circumstances that imposed changes to the project’s structure with the absence of an agreed upon plan to handle the changing conditions were obstacles in the management of PPPs |
| 14 | 66 |
| 2.2 External pressures | 

  | KF1.7: Pressures imposed by external sources had substantial impact on the management of PPP projects |
| 12 | 58 |
| 2.3 Coordination and communication | 

  | KF1.8: There were communication and coordination difficulties between partners in managing PPP projects |
| 11 | 52 |
4.1.3 The Nature and Management of the Institutional Differences

This section provides responses to Research Question 1.c:

**RQ.1.c:** How well managed are the institutional differences between the partnering organisations in the Jordanian PPPs?

Before outlining the approaches that managers adopted to manage the institutional differences between their PPP organisations, it is important to highlight these differences and their impact on the overall performance of the PPP projects as perceived by the partner managers.

**The nature of the institutional differences between partners**

The institutional differences between the partnering organisations were common in both case study organisations. Table 4.6 presents four themes that emerged from the data about the institutional differences between partners. These were (in descending order in terms of citation frequency): the internal decision processes; the institutional orientation; the degree of flexibility; and, differences in views between partners.

**Table 4.6: The institutional differences between partners**

<table>
<thead>
<tr>
<th>Q. 1.c: The Institutional Differences between Partners</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public SWWTP</td>
<td>Private QAIA</td>
</tr>
<tr>
<td>1 The internal procedures / processes</td>
<td>5 10</td>
<td>24 19</td>
</tr>
<tr>
<td>2 The institutional orientation</td>
<td>5 5</td>
<td>14 19</td>
</tr>
<tr>
<td>3 The degree of flexibility</td>
<td>5 10</td>
<td>10 14</td>
</tr>
<tr>
<td>4 Differences in views</td>
<td>5 5</td>
<td>5 10</td>
</tr>
</tbody>
</table>

Most of the institutional differences between partners were consistently acknowledged by the interviewees across the two case projects, although less emphasised by the public partner managers. The most prominent institutional difference between partners was the internal decision-making and taking processes for each partner (58% of responses). As reflected by the interviewees, the public partner was usually confined by over-bureaucratic and red-tape procedures, resulting in delays in taking decisions, and potentially delays in the construction of the project. A public partner manager commented:
We, ourselves, have a problem with our over-bureaucratic procedures and governmental red-tape. I remember when this project was started, I sent a letter to the Jordanian Social Security Establishment [a public sector entity], which is just located down the road, and took 14 days to get there! Our partner sent us a ‘claim’ complaining about the delay (S2.1/Pc).

The delay in the construction process was regarded by the study informants as one of the most serious problems that they have faced. However, apart from the institutional differences between partners that might have resulted in such delays, the interviewees mentioned other reasons that had to do with the nature of a PPP project itself. That is, a PPP project involved too many parties and participants with different views about what was the right course of action to follow in sorting out a problem. Other reasons related to the general financial and investment climate in Jordan (including the increase in the inflation rate) and the shortage of a qualified workforce to work on the PPP projects when established.

Yet, the fundamental differences in the institutional orientation between the private and public sector organisations was found to be another important institutional difference between partners (with 43% response). The interviewees confirmed that the PPP concept for the public sector partner was substantially affected by the sensitivity of the political, social and economic conditions in the country. The private sector partner also could not operate in a free and unconstrained manner as a completely ‘free market’ enterprise. One interviewee commented:

In a PPP project, we, as the private-sector partner, cannot operate as a completely ‘free market’ enterprise .. specifically, we must be acutely aware and sensitive to the political, social and economic sensitivities of our public-sector partner (S1.5/Pt).

Being more or less flexible to the changing circumstances imposed on PPPs was expressed by the study interviewees as another issue of the institutional differences between the public and private sector organisations (with 39% of responses). The interviews argued that the public sector partners were less flexible in responding to the changing situations. They did not fully acknowledge these changing conditions and liked to keep the status quo. The private sector partners, however, claimed to have been more flexible in responding to circumstantial changes. One private partner manager gave the following example:
The monthly fees that we are paid for the treated water is subject to the inflation rate, and the formula used (based on the indices published by the government) to calculate this rate does not reflect the real inflation rate. We are currently negotiating with them on how to set up this formula more accurately ($2.6/Pt).

The public partner interviewees suggested that being more flexible to adjust to the changing situations would have resulted in other changes that they might have not been ready to make such as putting extra funds into the project. One public partner manager confirmed:

We are not keen to make major modifications on the project design. As you know, such changes usually result in new scope of responsibilities, financial expenditures and technical specifications which we are not usually ready to handle ($1.4/Pc).

The PPP managers viewed these differences as resulting from the entrenched differences between the public and private sector organisations in the way each was inherently and instinctively structured. Another example of these differences was mentioned by one of the interviewees as follows:

When the fuel prices went up drastically, we had been substantially affected by that increase and asked the Ministry [the MWI] to review the formula used to calculate the payments and reimburse us the difference accordingly. They claimed that the governmental funding system and procedures do not support such compensation ($2.9/Pt).

Lastly, with a 25% response, the difference in views between the public and private partners was also regarded by the interviewees as a result of the fundamental institutional differences between them in a partnership arrangement.

KF1.9: Important institutional differences between partners included differences in the internal procedures, decision-making processes, institutional orientation, degree of flexibility, and, views

Managing the institutional differences between partners

The PPP managers’ response to the question that asked about the strategies and approaches that they adopted in managing the institutional differences between their partnering organisations were organised into two main categories. The first was the strategies that worked as safeguards in keeping the differences minimal. The second
was the approaches that they adopted to manage these differences whenever they prevailed. Table 4.7 presents the main themes that emerged from the data on each category. As shown in the table, the safeguards that limited the institutional differences were (in descending order according to the frequency of citation): awareness of the institutional differences; having mutual objectives and ends; the role of the project agreement; and, having a positive attitude. The strategies that the PPP managers adopted to address and handle their differences were (in descending order of the frequency of citation): establishing effective communication; compromising; and, learning by experience.

Table 4.7: Safeguards and strategies in managing the institutional differences between partners

<table>
<thead>
<tr>
<th>Q. 1.c: Safeguards and Strategies in Managing the Institutional Differences between Partners</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safeguards in limiting the impact of the institutional differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Awareness of the differences</td>
<td>Public SWWTP 19 QAIA 19</td>
<td>Private SWWTP 24 QAIA 19</td>
</tr>
<tr>
<td>2. Having mutual objectives and ends</td>
<td>Public SWWTP 19 QAIA 19</td>
<td>Private SWWTP 14 QAIA 19</td>
</tr>
<tr>
<td>3. The role of the project agreement</td>
<td>Public SWWTP 14 QAIA 24</td>
<td>Private SWWTP 14 QAIA 10</td>
</tr>
<tr>
<td>4. Having a positive attitude</td>
<td>Public SWWTP 10 QAIA 14</td>
<td>Private SWWTP 10 QAIA 10</td>
</tr>
<tr>
<td><strong>Strategies adopted to manage the differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Establishing effective communication</td>
<td>Public SWWTP 19 QAIA 14</td>
<td>Private SWWTP 24 QAIA 19</td>
</tr>
<tr>
<td>2. Compromising</td>
<td>Public SWWTP 19 QAIA 24</td>
<td>Private SWWTP 14 QAIA 14</td>
</tr>
<tr>
<td>3. Learning by experience</td>
<td>Public SWWTP 24 QAIA 14</td>
<td>Private SWWTP 10 QAIA 5</td>
</tr>
</tbody>
</table>

Across the two cases, both public and private partner managers viewed the institutional differences as a normal occurrence that they assumed to have improved their performance (with 81% of respondents mentioning this issue). For them, such differences were primarily associated with the characteristics and internal processes of each partner that the other partner had to accept them as they were. Instead, they mentioned that they had directed their attention and efforts to address their issues away from the ‘private’ concerns of the other partner whenever possible. As one interviewee expressed it:

Look! Differences in views between partners is a normal thing to happen when different worlds get to work together. As the saying: “Differing opinions do not spoil friendship” [an Arabic proverb]. It is all about improving the quality of the work to be done. The thing is not to let these differences put you down. You just have to get used to them and keep them down to the minimal. It is like the salt to the food! But, of course, too much salt spoils your dish! (S1.2/Pc).
Another partner manager communicated his views about the fundamental institutional differences between the public and private sector organisations as follows:

That is how it is. It is not the people, mate. Our public partner managers are keenly cooperative. It is the system [the bureaucratic system] and the way the public sector is managed. We came to work together bearing this in mind. It is not only in Jordan. We have been overseas in similar projects and working alongside our public partners within this [bureaucratic] environment (S1.11/Pt).

While the interviewees acknowledged the existence of the previously-mentioned institutional differences between their partnering organisations, they recognised that such differences had little impact on the overall performance of their PPP projects. The interviewees insisted that they had one goal in common to achieve and that this was by working hand in hand towards the same end to have a successful partnership through the accomplishment of their PPP projects. This theme was consistently cited by the managers of the private and public partners across the two cases (71% of citations). One interviewee stated:

Our main goal is to complete this project on time within budget and up to specified quality and standards. It is the same objective to our public partners with more focus on time and quality (S1.8/Pt).

Further, the interviewees acknowledged that such differences had little impact on the relationship between partners, and consequently on the performance of the project, as explained by one of the interviewees:

Although our main objective is to safeguard the interests of the GoJ [Government of Jordan] and offer a high quality service to the public, and the main objective of the investor is to make a return on his investment, so it is mainly 100% commercial objectives, it won’t be of the stake of any party to disagree. We are aware of this and we complement each other (S2.1/Pc).

The role that the project agreement played in the differences between partners was also another important factor that the interviewees thought of as one of the regulators to have a steady partnering relationship (with 62% response). The project agreement specified the broader aspects of the roles and responsibilities for each partner, and therefore, minimised the impact of the institutional differences between partners. One interviewee commented:
The project agreement. Yes, the project agreement. It is deeply detailed and its terms and conditions are well-explained (S1.4/Pc).

Another interviewee explained:

The [project] agreement itself is thoroughly detailed and its stipulations are well-explained. It has been prepared and organised by a group of legal and technical experts based on standardised similar BOT agreements. In such agreements, certain major themes are usually standardised and unchangeable, which leaves little room for big differences (S2.2/Pc).

The partners’ awareness of their own rights and obligations as well-stated in the project agreement was also highlighted by the interviewees as another safeguard that limited the effect of the institutional differences between their partnered organisations. As commented by one of the interviewees:

I believe everybody is fully aware of his duties and obligations and this is well defined in the project contract or agreement. You can say that everybody is working towards the same end. It is for the benefit of all parties. Isn’t it? (S1.3/Pc).

Lastly, the PPP managers confirmed that reacting positively to situations where institutional differences prevailed by showing a great deal of cooperation and understanding was an effective approach (with 44% of citations). Acknowledging the principal institutional differences between partners and working closely and cooperatively to get through the negative impact of these differences were examples of acting positively against these differences whenever they arose. The above-mentioned comments made by the PPP managers were an obvious reflection of the way they perceived and reacted to their institutional differences which served as safeguards in keeping these differences to the minimum.

Nevertheles**, establishing constant, assiduous and direct communication with the other partner was an imperative approach that PPP managers found useful in managing the institutional differences between their partnering organisations (mentioned 76%). One manager demonstrated:
The best way to address such differences is talking to the other partner. Whenever such differences arose, we sat together, addressed the matter and found out ways to sort out those differences. Regular interface, coordination and lobbying at the senior governmental levels have proven good strategies to ensure conflicts of interest are closely and timely addressed and resolved and that the objectives/interests of the private and public partners remain aligned (S1.10/Pt).

Being ready to negotiate and compromise was another approach that the PPP partners believed to have been useful on occasions where they anticipated that such differences would have substantial impact on the progress of their PPP project (cited by 71% of the interviewees). As one public partner manager explained:

Following the ‘give-get’ approach was successful in dealing with such differences. To face such instances, it makes sense to compromise. Compromising was a practical and effective strategy in situations where we reached an impasse or it was not possible to change something (S2.2/Pc).

Seeking third-party help was also another tactic that public and private partners followed in managing the impact of the institutional differences between their organisations (with 62% of citations).

If the agreement was not helpful, we seek third-party’s second opinion such as the legal consultants for legal matters and the IEs for technical matters. Again, the agreement itself explains exactly who the third-party would be and how to do that (S1.4/Pc).

No less important was that the PPP partners adapted themselves to certain procedures where they learnt by experience how to go over certain institutional obstacles to get things done, with 53% of citations made on this theme. One public partner manager talked about his experience in this regard as follows:

[...] I then realised that we have to do something about that [the government’s red-tape]. First, for urgent matters, I go there myself and set on people’s heads to get my thing done. Second, I started building up a network of social relations. Believe me; people are more willing to cooperate if they get to know you. How? Simply by being close to them; just like a friend. This helped a lot. Since then we rarely had delays in accomplishing the paperwork, for example (S2.1/Pc).

Another private partner explained further some of the adaptation strategies he used to ensure the continuity of the work to be accomplished:

It was planned to complete the construction phase within a period of 3 years. However it took us 4.5 years to do that. We learnt from that lesson. Now we always have an
alternative plan in our dealings with the partner. Just in case, you know. It is this way: to get things done on time, we start the process much earlier. Now, it is much better (S2.9/Pt).

Finally, through continuity in communication between partners, readiness to compromise in situations where such differences were anticipated to have influential impact on the progress of the PPP project and learning from their experience, PPP managers were able to manage the institutional differences between their organisations more effectively.

KF1.11: Establishing effective communication, compromising, and experience accretion were among the approaches that partners adopted to manage their institutional differences

In conclusion, the PPP managers, while conceding the existence of the institutional differences between their partnering organisations, adapted themselves to these differences by acknowledging the importance that the mutual goals, the project agreement and the awareness of own their rights and obligations played in regulating their relationships and management performance.

A summary of the key findings for RQ1.c, which addressed the nature of the institutional differences and the management approaches that the PPP managers followed to manage these differences is presented in Table 4.8. The interviewees’ response to this research question was organised under two broad themes: the institutional differences between partners, and the management of these differences. In relation to the second theme, the strategies and approaches that they adopted in managing their institutional differences between were organised into two main categories. The first was the safeguards that kept the differences to the minimal, and the second was the approaches that PPP managers adopted to manage these differences. Four themes emerged in addressing the nature of the institutional differences between PPP partners. These were: the internal decision processes; institutional orientation; degree of flexibility; and, differences in views between partners. The safeguards that limited the institutional differences were: awareness of the institutional differences; having mutual objectives and ends; the role of the project agreement; and, having a positive attitude. The strategies that the PPP managers adopted to address and handle their differences were: establishing effective communication; compromising; and,
learning by experience. These themes and sub-themes were found to be closely linked to the effective management of the implementation phase of the PPP projects.

Table 4.8: Summary of the key findings for RQ1.c
(The institutional differences and their management)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Finding</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The institutional differences between partners</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 The internal decision processes</td>
<td>KF1.9: Important institutional differences between partners included differences in the internal procedures, decision-making processes, institutional orientation, degree of flexibility, and, views</td>
<td>12</td>
</tr>
<tr>
<td>2 The institutional orientation</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>3 The degree of flexibility</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>4 Differences in views</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Safeguards in limiting the impact of the institutional differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Awareness of the differences</td>
<td>KF1.10: The awareness of the institutional differences; having mutual objectives and working towards the same ends, having a well-detailed project agreement, and perpetuation of positive attitude served as safeguards that limited the impact of the institutional differences between partners</td>
<td>17</td>
</tr>
<tr>
<td>2 Having mutual objectives and ends</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>3 The role of the project agreement</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>4 Having a positive attitude</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Strategies adopted to manage the differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Establishing effective communication</td>
<td>KF1.11: Establishing effective communication, compromising, obtaining third-party assistance and experience accretion were among the approaches that partners adopted to manage their institutional differences</td>
<td>16</td>
</tr>
<tr>
<td>2 Compromising</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>3 Learning by experience</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

4.1.4 PPP Management Expertise and Competence

This section provides responses to Research Question 1.d:

**RQ.1.d: What management expertise and competency is needed in managing PPPs in Jordan?**

The management expertise and competency required for the effective management of PPPs that emerged from the data are presented in Table 4.9. The themes that emerged from answering this question were organised under four main categories, namely: personal qualities and attributes; skills; experiences; and, knowledge, training and qualifications.
Table 4.9: PPP management expertise and competency

<table>
<thead>
<tr>
<th>Q. 1.d: PPP Management Expertise &amp; Competency</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public SWWTP QAIA</td>
<td>Private SWWTP QAIA</td>
</tr>
<tr>
<td><strong>Personal attributes and abilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Adaptability and flexibility</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1.2 'Scoping in/out' ability</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>1.3 Patience and self-motivation</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td><strong>Skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Social and interpersonal</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>1.2 Project management</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>1.3 Communication</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Technical experience</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>3.2 Project management experience</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>3.3 Negotiation and arbitration experience</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td><strong>Knowledge, training and qualification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Business-public project management</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>4.2 Project management</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>4.3 Financial background</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>4.4 Knowledge in programming and scheduling techniques</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

The personal attributes and abilities in the management of PPPs

A number of personal qualities and abilities suggested by the interviewees that should be available to the person who takes the role of managing PPP projects are shown in Table 4.9. Although less cited by the public partner managers across the two cases, these attributes and abilities were viewed by the private partner managers as closely related to effective PPP management.

The ability to cope with, and adapt to different changes in the other partner during the course of the partnership, was one of the most important attributes that should be available to a PPP manager (cited by 63% of the interviewees). One interviewee commented:

PPPs generally space from 10 to 30 years, and as such, the private sector partner must ensure that they are able and prepared to work with whomever is in power, as the governing parties/blocks will undoubtedly change several times over the course of the partnership. So, it is essential that managers have the ability to adapt to shifts in public policy and government representation ($1.10 /Pt).
Within this theme, the interviewees also suggested that PPP managers should be flexible to adjust their management style to suit the new working environment. Another interviewee explained:

You have to have the ability to promptly adjust to a certain management style that mostly fits into each new project/country. This is not just a skill and knowledge that you get to have. It is more than this. It is about changing the ways of your thinking and doing things. For example, there are different requirements and approaches in managing human resources in each project/country (S2.10/Pt).

For the managers to be successful in managing their PPP organisations, the ability to ‘scope in and out’ was the second important personal attribute that PPP managers must have (cited by 53% of interviewees). According to the interviewees, this meant that managers should be deeply involved in the daily routines of the work, and at the same time, be able to see the whole picture from a broader angle and a longer distance from time to time.

‘Zooming in/out’ is an exercise I use in my interviews with candidates applying for senior management positions in our company. While I would like them to be heavily involved in their daily routines, I would like them to think of whether their actions are taking them the right direction. It is a thing you can learn by practice (S2.9/Pt).

Being patient and self-motivated were the third most important traits that PPP managers are perceived to need (with 34% of citations). They insisted that having these traits enabled them to accommodate themselves to deal with desperate situations where the ups and downs were usually everyday happenings in managing PPP-type projects.

I highly recommend that a PPP manager should take things patiently and steadily. I know it is not easy to take things a bit easily in a working environment that is highly stressful and sometimes devastating. But, you learn by experience that every problem has a way out. Looking backwards, you can see that you’ve gone over a lot of pain. Looking outside that window, you see the factory is now up and running. So, why worry? (S2.6/Pt).

Finally, the interviewees also mentioned other less important qualities that would be favourable for the PPP managers to have. Examples of these were: to be technologically-savvy; and, have the ability to apply the possessed skills at work.

KF1.12: Adaptability and flexibility; ‘scoping in/out’ ability; and, patience and self-motivation are personal qualities and abilities were important for the PPP managers
The skills required in managing PPPs

Across the two case projects, the skills that were cited by the interviewees as needed to effectively manage a PPP project were (in descending order of importance): social and interpersonal; project management; communication; and, negotiation and arbitration skills.

As mentioned by the interviewees, having social and interpersonal skills such as arbitration skills were important requirement in the first place for more effective PPP management (with 58% citation). In addition, according to 48% of the interviewees, having project management skills was a necessity in managing PPPs. Communication skills such as negotiation were also other important skills that the PPP managers necessitate (cited by 43% of the interviewees). One interviewee elaborated on the importance of having these skills as follows:

We spend most of our time talking to people inside and outside this organisation. So, having social and communication skills are all highly important in our internal and external relationships. Negotiation and arbitration skills are also highly needed particularly in our dealings with the other partners. Nonetheless, having project management skills is a ‘must have-type’ of skills. You get to have the ability to run such type of projects with such socio-technical complications (S1.3/Pc).

Reference to the importance of having both social and technical skills seemed to be shared amongst the majority of the PPP project managers.

The experiential background of the PPP managers

The interviewees perceived that PPP managers should have an outstanding technical experience in the first place (with 63% of citations), project management experience in the second place (with 53% of citations), and lastly, negotiation and arbitration experience (with 24% of citations). Two interviewees explained how important these experiences were to the PPP managers:

We had situations when we were so desperate in finding people who have technical experience in working in similar projects to do the work on-site. We ended up recruiting
these from Egypt and India. Well, this is not too bad. You see not all players in Real Madrid are Spanish. They have players recruited from everywhere. They play and win! But, for such mega long-term projects, it is more preferable to have people from the local market to sustain the long-term objectives of the project, providing that they have enough experience to work on this project (S2.7/Pt).

Sufficient experience in project construction management, as well as in managing any water treatment project is highly recommended. Any manager working in this project has to ‘get his fingers into the water’ [to appreciate and value the importance of water; to have experience in the water industry]. In addition, because senior managers are in regular contact with other partners, business-sound experience in negotiation and arbitration is a necessity (S2.3/Pc).

Therefore, the type of experience that was most needed in managing PPPs was mainly related to technical and social communication experiential aspects. Having previous technical and project management experience, as well as experience in negotiation and arbitration were such examples.

**PPP knowledge, training and qualification requirements**

It was consistently agreed by the interviewees, across the two case studies that PPP managers should: be well-trained and qualified to manage business/public-type projects (with 76% of citations); have extensive knowledge in managing the project’s construction and operation (with 71% of citations); be qualified to handle the financial and cost management aspects of the project (with 58% of citations); and, be familiar with, and able to use programming and scheduling techniques (with 43% of citations).

Not sure if your university in Australia offers qualifications like business-public project management? [referring to the PPP management] Not only we have few PPP-experienced people, but we also don’t have at all employees who have qualifications in managing PPP projects, which we desperately need. Admittedly, to be able to manage this project, managers should be Project Management Professional (PMP) certified, which I personally do not have (S1.7/Pc).

Knowledge in construction and operation processes of the project was another important ingredient of the PPP management competency. Adding to this, knowledge in other managerial and technical systems, which were directly related to the workplace requirements/settings was also important. One of the interviewees explained:
Extensive-sound technical knowledge in the construction itself is a must. That is to be able to monitor and manage the proper sequence of the project’s activities and deal with such level of technological sophistication. We recruited people from Greece to construct the Domes that needed highly specialised labour force. In addition, knowledge in Quality Assurance (QA), Quality Control (QC) and Health, Safety and Environment (HSE) are of great importance in the management of this project (S1.9/Pt).

Moreover, in order to effectively and efficiently manage PPP projects, the interviewees insisted that PPP managers must have extensive knowledge in the financial aspects of the project, as well as monitoring and scheduling techniques and methods used in these. One interviewee wondered:

How can you run this project without having sufficient knowledge in the techniques and systems applied in monitoring and follow up the progress of the project like Critical Path Method (CPM) and other financial, technical and managerial programming and scheduling techniques? (S1.1/Pc)

Other favourable types of knowledge and qualifications that the PPP managers should have, mentioned less frequently by the interviewees, were: knowledge in the policies and practices adopted by the partner; computer literacy; and, legal and contracting knowledge.

A summary of key findings of RQ1.d, which addressed the management expertise and competency required for the effective management of the PPPs is presented in Table 4.10. The interviewees’ responses to this sub-research question were organised under four categories: the personal qualities and attributes; skills; experiences; and, knowledge, training and qualifications of the PPP managers. In the first category, three themes emerged: adaptability and flexibility; ‘scoping in/out’ ability; and, patience and self-motivation. In the second category, four themes emerged: negotiation and arbitration skills; project management skills; communication skills; and, social and interpersonal skills. In the third category, three themes emerged: technical experience; experience in managing similar projects; and, experience in negotiation and arbitration. In the fourth category, four themes emerged: PPP management; project management; financial background; and, knowledge in programming and scheduling techniques. The
Availability of these types of attributes and abilities, skills, experiences and knowledge was found to be closely linked to the effective management of the implementation phase of the PPP projects.

Table 4.10: Summary of the key findings for RQ1.d:

(PPP management expertise and competency)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Findings</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Personal attributes and abilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Adaptability and flexibility</td>
<td><em>KF1.12:</em> Adaptability and flexibility; ‘scoping in/out’ ability; and, patience and self-motivation are personal qualities and abilities were important for the PPP managers</td>
<td>13 63</td>
</tr>
<tr>
<td>1.2 ‘Scoping in/out’ ability</td>
<td></td>
<td>11 53</td>
</tr>
<tr>
<td>1.3 Patience and self-motivation</td>
<td></td>
<td>7 34</td>
</tr>
<tr>
<td><strong>2. Skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Social and interpersonal</td>
<td><em>KF1.13:</em> A set of skills were important to effectively manage PPPs. These were: social and interpersonal skills; project management skills; and, communication skills</td>
<td>12 58</td>
</tr>
<tr>
<td>1.2 Project management</td>
<td></td>
<td>10 48</td>
</tr>
<tr>
<td>1.3 Communication</td>
<td></td>
<td>9 43</td>
</tr>
<tr>
<td><strong>3. Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Technical experience</td>
<td><em>KF1.14:</em> PPP managers should have sufficient technical and project management experience, as well as experience in negotiation and arbitration</td>
<td>13 63</td>
</tr>
<tr>
<td>3.2 Projects management experience</td>
<td></td>
<td>11 53</td>
</tr>
<tr>
<td>3.3 Negotiation and arbitration experience</td>
<td></td>
<td>6 29</td>
</tr>
<tr>
<td><strong>4. Knowledge, training and qualification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 PPP management</td>
<td><em>KF1.15:</em> PPP managers should be knowledgeable and qualified to manage the construction, operational and financial aspects of the PPP project. They should also be familiar with, and use programming and scheduling techniques</td>
<td>16 76</td>
</tr>
<tr>
<td>4.2 Project management</td>
<td></td>
<td>15 71</td>
</tr>
<tr>
<td>4.3 Financial background</td>
<td></td>
<td>12 58</td>
</tr>
<tr>
<td>4.4 Programming and scheduling techniques</td>
<td></td>
<td>9 43</td>
</tr>
</tbody>
</table>

4.1.5 PPP Monitoring and Controlling Mechanisms

This section provides responses to Research Question 1.e:

*RQ.1.e: What are the effective performance monitoring and controlling mechanisms used to oversee the progress of PPPs in Jordan?*

The most effective monitoring and controlling mechanisms used to oversee the progress of the PPP projects that emerged from the data, as perceived by the interviewees, are presented in Table 4.11. These controls were (in descending order): complying with the project agreement (with 66% of citations); following up progress reports (with 57% of
citations); and, applying specialised monitoring techniques (with 57% citations); and, other controls (with 57% of citations).

Table 4.11: PPP monitoring and controlling mechanisms

<table>
<thead>
<tr>
<th>Q. 1.e: PPP Monitoring and Controlling Mechanisms</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public SWWTP QAIA Private SWWTP QAIA Total Freq.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Complying with the project agreement</td>
<td>14 19 19 14 33 33 66</td>
<td></td>
</tr>
<tr>
<td>2 Following up progress reports</td>
<td>19 14 14 10 33 24 57</td>
<td></td>
</tr>
<tr>
<td>3 Putting in place specialised monitoring tech.</td>
<td>14 19 10 14 24 33 57</td>
<td></td>
</tr>
</tbody>
</table>

The monitoring techniques and mechanisms used in the management of PPP projects in Jordan varied from rudimentary to very sophisticated, from being common to all partners to more individually custom-tailored controls.

Complying with the project agreement

The project agreement was used by the project managers as a reference point or a benchmark to work according to during the implementation course of the project. In association with the project agreement, a detailed project plans which were set up and agreed upon by the partners before the commencement of the project are other controlling mechanisms that were used to monitor the progress of the PPP projects. These plans are part of the agreement and included a detailed view of the activities to be accomplished in the construction and operation processes during the course of the PPP project.

The project agreement and the detailed plans which were previously prepared and established and agreed upon by partners before the start of the project were described by the interviewees as controlling measures that they worked accordingly to ensure that everything was going according to the requirements and specifications detailed in them. One interviewee commented:

You see, within each partner, there are a number of controlling measures and techniques in use. This agreement and the plans associated to it are the only one common thing we all refer to as an important controlling measurement framework ($1.9/Pt)$.
In the projects under study, it was found that before these projects had commenced, the private partner had prepared and submitted detailed project plans to the public partner for review, discussion and agreement. Once agreed upon by both partners, these plans were used as a base to monitor and oversee the progress of the project, and see if the work accomplished was according to these plans.

We refer to these plans on weekly or even daily basis. If we figure out or anticipate any deviation to these schedules, we communicate the matter to our private partner and see if a remedial action or recovery schedules are needed (S2.3/Pc).

According to the PPP managers, across the two case study organisations, the project agreement and its enclosed detailed plans were of great assistance to them and viewed by the managers as a ‘thermometer’ which measured whether the progress on the ground was going according to the agreement and the detailed plans.

**Following up progress reports**

Following up reports that were prepared by the staff or the engineers on the site and dispatched to the management was another control mechanism that partners used to oversee the progress of their PPP projects. Reports prepared by the IEs, maintenance engineers or the public or private employees who were based on the site were thoroughly reviewed by the management of each party. The public and private partners exchanged these reports and met regularly to discuss any discrepancies or variations in the implementation.

The reports we receive from the construction site are our main input to follow up any matter of concern with the other partner. Look at this report, for example. This is the last report prepared by our IEs on the site. Here is another report (checklist form) prepared by our staff. And this is our partner’s report for the same period. We will have a meeting tomorrow with our partner to discuss the things highlighted in these reports (as you see) in the presence of each reporter (S1.6/Pc).

The progress reports were prepared and dispatched periodically on a weekly and monthly basis or whenever a need arose. Concurrently, each partner adopted internal management, financial and technical control systems. Examples of these controls were the periodic staff evaluation systems, internal reporting procedures, financial auditing and technical quality assurance and control systems.
Putting in place specialised monitoring techniques

Equally important to following up progress reports, the data collected that each partner adopted different specialised internal control systems to assist in the management of their part of the PPP project. For example, the public partner of the QAIA was following what is called the QUESH manual/program to control the Quality, Environment, Safety and Health aspects of the project. This control system specified the requirements of the work to be done, the standards to which the work should be accomplished, the people who should do the work and the procedures to do the work and report problems. It also included the safety precautions and the requirements for material and non-material objects on the site. The private partner of the QAIA was using what is called the Primavera programming technique and software and an advanced version of the CPM to follow up the progress of the project. The private partner of the SWWTP was using a management control program called OMEGA, to control the quality standards of the technical aspects of the project and standardise the management processes and practices in all wastewater treatment projects of the company worldwide. The public partner of the SWWTP was using internally developed performance criteria based on the international standards in the wastewater treatment operations and industry.

The interviewees asserted that the fact that these controls were different did not necessarily mean that they contradicted each other in practice. One private partner manager commented:

[...] they [the controls] complement each other. We both sit and look into any variation and see why there is such difference. The idea is that we are not fighting each other. We stand side by side to fight for more improved quality and performance levels (S1.2/Pc).

Another interviewee explained:

The OMEGA is a specialised internationally recognised monitoring system with high levels of quality standards that are used in the management of wastewater treatment projects (S2.4/Pl).

The experience of the public partner of the SWWTP in developing the performance indicators (PIs) was an example of using internally custom-tailored controlling measures to monitor the progress of the PPP project. In May 2008, the MWI decided to
establish a Water Sector Auditing Unit (WSAU) within the PMU structure to assist in rolling out performance indicators country-wide and to monitor the performance of all private and public water utilities, including the SWWTP project. The WSAU was also created to ensure that water and wastewater services are delivered at fair and reasonable tariffs and that the interests of customers are protected by ensuring that they receive the expected levels of service (LoS) (S2.2/Pc).

In cooperation with the PMU, the WSAU developed additional PIs, Benchmarking System and Monitoring and Auditing Protocols that were originally suggested by the International Water Association (IWA) to assess the quality of the treated water produced. Derived and tailored from the extensive set of 138 PIs of the IWA, the current system holds around 35 indicators. These were grouped into seven main categories, namely: water resources, personnel, physical components, operations, quality of services, finance, and wastewater treatment (S2.4/Pc). This system was also used by the SWWTP as a framework for its construction works and operations.

The interviewees identified other important, however less frequently cited, controlling mechanisms. The private partner, for example, was primarily driven by the best industry practices, nationally and internationally, engaging third party consultants to conduct quality assurance and customer opinion research and surveys to improve the financial and service performance levels. The public partner, on the other hand, had the right to withhold payments to the private partner if things did not go to plan. Payments were tied to the progress made and processed only if the agreed upon targets were achieved.

Finally, the answer to the question of whether these controlling mechanisms were effective in overseeing the progress of the PPP projects was previously provided in section 4.1.1. The interviewees viewed the mechanisms they put in place/employed to monitor the progress of their PPP projects were effective enough in managing PPPs.

KF1.16: Complying with the project agreement, following up progress reports and applying specialised monitoring techniques were the most effective monitoring and controlling mechanisms to oversee the progress of the PPP projects

The performance indicators (PIs) are set of characteristic parameters that have been utilised to describe the operational, financial, and technical status of water service providing entities. Based on the measurement of the variables that define an indicator, these indicators assist in pointing to the causes of the problems and deficiencies in the treated water produced by the plant (S2.1/Pc).
(with 52% of citations). In addition to the monitoring controls mentioned above, the interviewees referred to employing IEs, consultants and advisors, and establishing database systems as two effective practices that greatly assisted them in managing their PPP projects.

A summary of key findings of RQ1.e, which addressed the most effective monitoring mechanisms used to oversee the progress of the PPP projects are presented in Table 4.12. The interviewees’ responses to this sub-research question were organised under three themes, namely: complying with the project agreement; following up progress reports; and, applying specialised monitoring techniques. These monitoring mechanisms were found to be closely linked to the effective management of the implementation phase of the PPP projects.

**Table 4.12: Summary of the key findings for RQ1.e:**
(The PPP monitoring mechanisms)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Findings</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Complying with the project agreement</td>
<td><em>KF1.16</em>: Complying with the project agreement, following up progress reports and applying specialised monitoring techniques were the most effective monitoring and controlling mechanisms to oversee the progress of the PPP projects.</td>
<td>14 66</td>
</tr>
<tr>
<td>2 Following up progress reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Applying specialised monitoring techniques</td>
<td></td>
<td>12 57</td>
</tr>
</tbody>
</table>

To conclude, the interviewees’ responses to the first research question RQ.1 provided detailed knowledge and better understanding about the management of the implementation phase of the PPP projects in Jordan. Specifically, it elucidated the effective practices in managing PPPs, the difficulties that faced their management, the institutional differences between PPP partners, the management expertise required in managing PPP projects, and the monitoring and controlling mechanisms used to oversee the progress of the PPP projects in Jordan. Table 4.13 provides a summary of the key findings for the RQ.1 that were related to the PPP management framework. A summary of the main themes emerged from answering RQ.1 is presented in Figure 4.2.

The following section investigates the environment in which inter-organisation relationships (IORs) in Jordanian PPPs are managed and presents the study findings about the nature and management of the IORs in PPP settings.
Effective PPP Practices (RQ.1.a; KFs 1.1-3)

PPP management difficulties (RQ.1.b; KFs 1.4-8)

Effective PPP Management

PPP institutional differences (KF 1.9)

Safeguards limiting the institutional differences (KF 1.10)

Managing the institutional differences (KF 1.11)

Attributes and abilities (KF 12)

Skills (KF 13)

Experience (KF 14)

Knowledge & training (KF 15)

PPP institutional differences & mgt (RQ.1.c; KFs 1.9-11)

PPP management expertise & competency (RQ.1.d; KFs 1.12-15)

PPP monitoring mechanisms (RQ.1.e; KF 1.16)

Internal (KFs 4-5)

External (KFs 6-8)

Managing the institutional differences (KF 1.11)

Figure 4.2 Summary of the main themes emerging from answering research question RQ.1
### Table 4.13: Summary of the key findings for RQ.1 (PPP management framework)

<table>
<thead>
<tr>
<th>Key Findings of RQ1.a (Effective PPP Management Practices)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KF1.1</strong> A number of human resource management practices are closely related to</td>
</tr>
<tr>
<td>effective PPP management. Special attention was given by the private partner</td>
</tr>
<tr>
<td>to recruiting, training and developing the local labour force</td>
</tr>
<tr>
<td><strong>KF1.2</strong> Working closely with the other partner, a well-detailed project</td>
</tr>
<tr>
<td>agreement and using effective monitoring mechanisms were amongst the most</td>
</tr>
<tr>
<td>effective PPP management practices</td>
</tr>
<tr>
<td><strong>KF1.3</strong> Having prior experience in managing PPP projects has proved to be</td>
</tr>
<tr>
<td>an effective PPP management practice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Findings of RQ1.b (PPP Management Difficulties)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal management difficulties</strong></td>
</tr>
<tr>
<td><strong>KF1.4</strong> Certain human resource issues, such as staff shortages in quantity and</td>
</tr>
<tr>
<td>quality, especially at the beginning of the PPP project, were difficult to manage</td>
</tr>
<tr>
<td><strong>KF1.5</strong> Public partner managers lacked sufficient knowledge and experience in</td>
</tr>
<tr>
<td>managing their PPP projects at the beginning of the project.</td>
</tr>
<tr>
<td><strong>External management difficulties</strong></td>
</tr>
<tr>
<td><strong>KF1.6</strong> The unexpected circumstances that imposed changes to the project’s</td>
</tr>
<tr>
<td>structure with the absence of an agreed upon plan to handle the changing</td>
</tr>
<tr>
<td>conditions were obstacles in the management of PPPs</td>
</tr>
<tr>
<td><strong>KF1.7</strong> Pressures imposed by external sources had substantial impact on the</td>
</tr>
<tr>
<td>management of PPP projects</td>
</tr>
<tr>
<td><strong>KF1.8</strong> There were coordination and communication difficulties between partners</td>
</tr>
<tr>
<td>in managing PPP projects</td>
</tr>
</tbody>
</table>

<p>| Key Findings of RQ1.c (The Institutional Differences and their Impact and       |</p>
<table>
<thead>
<tr>
<th>Management)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The institutional differences between partners</strong></td>
</tr>
<tr>
<td><strong>KF1.9</strong> Important institutional differences between partners included</td>
</tr>
<tr>
<td>differences in the internal decision-making processes, institutional orientation,</td>
</tr>
<tr>
<td>degree of flexibility, and, views.</td>
</tr>
<tr>
<td><strong>Safeguards in limiting the impact of the institutional differences</strong></td>
</tr>
<tr>
<td><strong>KF1.10</strong> The awareness of the institutional differences; having mutual</td>
</tr>
<tr>
<td>objectives and working towards the same ends, having a well-detailed project</td>
</tr>
<tr>
<td>agreement, and perpetuation of positive attitude served as safeguards that</td>
</tr>
<tr>
<td>limited the impact of the institutional differences between partners</td>
</tr>
<tr>
<td><strong>Strategies adopted to manage the differences</strong></td>
</tr>
<tr>
<td><strong>KF1.11</strong> Establishing effective communication, compromising, and experience</td>
</tr>
<tr>
<td>accretion were among the approaches that partners adopted to manage their</td>
</tr>
<tr>
<td>institutional differences</td>
</tr>
</tbody>
</table>
### Key Findings of RQ1.d: (PPP Management Expertise and Competency)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KF1.12</strong></td>
<td>Adaptability and flexibility; ‘scoping in/out’ ability; and, patience and self-motivation are personal qualities and abilities were important for the PPP managers</td>
</tr>
<tr>
<td><strong>KF1.13</strong></td>
<td>A set of skills were important to effectively manage PPPs. These were: social and interpersonal skills; project management skills; and, communication skills</td>
</tr>
<tr>
<td><strong>KF1.14</strong></td>
<td>PPP managers should have sufficient technical experience, project management experience, and, negotiation and arbitration experience</td>
</tr>
<tr>
<td><strong>KF1.15</strong></td>
<td>PPP managers should be knowledgeable and qualified to manage the construction, operational and the financial aspects of the PPP project. They should also be familiar with, and use programming and scheduling techniques</td>
</tr>
</tbody>
</table>

### Key Findings of RQ1.e: (PPP Monitoring Mechanisms)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KF1.16</strong></td>
<td>Complying with the project agreement, following up progress reports and applying specialised monitoring techniques were the most effective monitoring and controlling mechanisms to oversee the progress of the PPP projects.</td>
</tr>
</tbody>
</table>
4.2 FINDINGS RELATED TO THE INTER-ORGANISATIONAL RELATIONSHIPS (IORs) FRAMEWORK

The inter-organisational relationships (IORs) framework involves providing answers to the following main research question:

RQ2: What is the environment in which inter-organisational relationships (IORs) in Jordanian PPPs are managed?

This research question consists of the following three sub-research questions:

RQ2.a: What is the nature, content and context of the inter-organisational relations (IORs) between PPP partners in Jordan?
RQ2.b: How well managed are the IORs between PPP partners in Jordan?

4.2.1 The Nature of the IORs between Partners

The following provides responses for RQ2.a (the inter-organisational relationships between the PPPs partners):

**RQ2.a: What is the nature of the inter-organisational relationships (IORs) between PPP partners in Jordan?**

The interviewees’ responses to the research question asking about the nature of the inter-organisational relationships between PPP partners was categorised under five themes presented in Table 4.14. These themes were: the interaction purpose; frequency; media and methods; constraints; and, nature. Within each of these themes, a number of sub-themes emerged from the data addressing this research issue (the inter-organisational relationships between partners).
Table 4.14: The IORs between PPP partners

<table>
<thead>
<tr>
<th>RQ2.a: The nature of the relationship with the other partner</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td>SWWTP</td>
<td>QAIA</td>
</tr>
<tr>
<td>1. The interaction purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To discuss progress</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>To coordinate activities</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>To take decisions</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. The interaction frequency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily and weekly</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Ad hoc / any time</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Monthly</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>3. The interaction media and methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email, mail, telephone calls</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Direct communication</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Indirect communication (reports, the IEs)</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>4. The interaction constraints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy workload</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Financial, time and other resources</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Coordination difficulties</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>5. The relationship nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complementary relationship</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Mutual/compatible goals and ends</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>‘Win-win’ relationship</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>The project agreement</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Equality</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Trust and commitment</td>
<td>10</td>
<td>14</td>
</tr>
</tbody>
</table>

The purpose of the interaction

First, the need to discuss the progress achieved and the hurdles that hindered that progress or was anticipated to cause inconveniences to the progress of the project were the main reasons for the PPP managers interacting with each other (cited 71% consistently across the two cases). Second, it was found that PPP managers communicated with each other whenever a need arose to coordinate activities and exchange views on certain matters that were related to the progress of the project (cited 57% across the two cases). Third, the public and private partner managers communicated with each other in situations where decisions were needed to be mutually taken by both partner managers (cited 29%).

We have a monthly set progressive meeting to review and discuss the progress as well as any matters of concern to any partner. We also meet whenever there is a need to coordinate activities and decide and plan for the next course of action. These meetings are the best way to keep everybody hooked to the project (S1.2/Pc).
**The frequency of the interaction**

Most of the interaction between the PPP public and private managers occurred on a daily and weekly basis (mentioned by 53% of interviewees), through emails, regular mail, memos and telephone calls. Equally frequently cited (53% of interviewees), was the ‘ad hoc/any time’ type of communication between the public and private partnership managers. This form of communication occurred whenever a need arose through telephone calls, electronic email or sometimes unplanned ‘drop in’ visits. Lastly, the monthly interaction between the public and private managers was a common form of communication between them (with 34% of citations). One manager commented:

> We are in touch with our partners on almost daily basis. We exchanged our private mobile numbers the first time we met (S1.1/Pc). A part from our periodic scheduled meetings, we can call, email or arrange to visit them anytime whenever required, depending on the matter/concern at hand. We are happy with this arrangement as well as they are too (S2.9/Pt).

It is noted here that the quarterly and yearly forms of interaction such as progress meetings were not reported by the interviewees as usual forms in their communication with each other as discussed in the following chapter.

**The interaction media and methods**

The most frequent interaction between the PPP partners had occurred through electronic and regular mail, and telephone calls (with 71% of citations, consistently across the two cases/partners). The direct, face-to-face form of communication that partners used to communicate with each other was mentioned by the interviewees as the second most frequent interaction (with 52% of citations). This type of communication mainly happened in the form of monthly progress meetings and visits. Communicating indirectly, by exchanging reports and through the IEs for example, was another form of interaction between the partnering managers across the two cases (with 33% of citations). One interviewee explained the ways, methods and circumstances of interacting with the other partner as follows:

> Depending on the subject matter and the need. The phone is the most convenient method to start with, for example, to arrange for a meeting or to report the matter or to do a visit. We also conduct weekly or bi-weekly meetings as per the degree of urgency and
complexity of the issues to be discussed with our partner. Our staff and IEs with theirs on the site, are in regular contact with each other, and report us the outcome of their findings (S2.3/Pc).

To conclude, public and private partners kept the interaction between them on a regular basis to discuss the progress achieved and to coordinate their activities, mostly through direct methods of communication such as telephone calls, meetings and visits. Using indirect communication methods such as exchanging reports prepared and dispatched by the staff and the IEs on the site was another important, however less frequent, way of communication between partners.

**KF2.1: Communication between partners mainly aimed to discuss progress, coordinate activities and take decisions. This interaction took place on daily, weekly, monthly and ad hoc basis mostly through mail, phone calls and face-to-face communication**

*The interaction constraints*

Finally, the PPP managers viewed the stressful working environment that they experienced (due to the heavy workload that should be accomplished with a small number of employees) was one of the greatest obstacles for having more frequent interaction with their partners (cited by 47% of interviewees). Additionally, it was found that other constraints that were mainly related to the unavailability of financial, time and other resources had a similar impact on the frequency of interaction between partners (cited by 43% of interviewees). Lastly, the difficulties that the PPP managers confronted in coordinating their activities had potentially restricted their interaction with each other (cited by 29% of interviewees). One interviewee gave the following comment about the constraints that the PPP managers confronted in managing their projects:

*We have time and resources constraints. In the start-up period of the project, the private partners were often inundated with requirements/expectations of the public partner and lenders, and the workload in the first 12-18 months was generally excessive. Besides, some activities in the construction, such as the civil engineering, civil works and electrical and mechanical major works for coating of cements for example, need to be coordinated with different parties involved. Coordination in this case is extremely an exhaustive job (S1.8/Pt).*

Obtaining extra funds due to a modification in the project design or to meet an unexpected urgent demand that needed financial investment was also mentioned by
other interviewees as a an obstacle to more frequent interaction between partners. One interviewee commented:

As I told you, modifications to the original plans of the project design was faced with our financial constraints as a public partner. Also, requesting additional resources to meet an urgent need is faced with the government’s long, never-ending procedures. As you know, such urgent need to inject extra funds into the project is always faced with difficulties (S1.2/Pc).

Therefore, the interaction between partners was mainly constrained by heavy daily work routines that resulted in having less time for more frequent interaction between partners. Added to the time and workloads constraints, the insufficient resources and coordination difficulties were other constraints that limited the interaction between partners.

KF2.2: Heavy workload, time and financial resources and coordination difficulties were the most common constraints that impacted on the frequency of interaction between partners

The nature of the relationship

The IORs were consistently viewed by the interviewees as a complementary relationship (with 72% of citations). The interviewees expressed the way they viewed the relationships between their PPP organisations as comparative advantages that each individual partner brought to the partnership. As such, the inter-organisational relationships were viewed by the PPP managers as strengths more than being threats. One of the managers expressed this view as follows:

Everyone involved in this partnership has something to give out in order to get; otherwise, there is no point in being there. Also, what is given by each partner is needed to the partnership. This need could be anything such as certain expertise, financial resources, materials or any other resource (S1.3/Pc).

The nature of the relationship between the PPP partner managers was further viewed by the interviewees as subject to having compatible goals that they mutually sought to achieve (cited by 67% of the interviewees). The interviewees also described their relationship with the other partner as a ‘win-win’ relationship (with 57% frequency of citations), in that issues of concern were addressed and sorted out by the agreement of all parties, and therefore, the benefits were shared between them. As such, the PPP managers could not see their individual goals achieved in separation of the achievement of their partner’s goals. Within this view, the PPP managers perceived their relationships
with each other as a function of the awareness of each partner’s role, rights and obligations which were well-defined in the project agreement. In addition, this relationship was viewed by the PPP managers as a function of equality, trust and commitment in their dealings with each other.

The nature of relationships that bind partners together was well-explained by one of the interviewees as follows:

In the PPP projects, you and the other partner are neck in neck, peers and equals. We have one objective: to see this partnership a successful one. Doesn’t matter what sort of benefits each partner gets. That is basically what everybody is there for. That is to win. And, that’s why it is called ‘partnership’. It is partnership by default (S1.5/Pc).

Another partner manager viewed the role that the project agreement played in regulating the official relationships between partners as follows:

Officially, the relationships between us are well-defined in the project agreement. It explains in detail the role, rights and obligations of each partner, as well as the nature of the involvement of each party. In fact, the agreement is the main framework we all refer to in the case of any misunderstanding (S2.9/Pt).

Nevertheless, as mentioned by the study interviewees, equality in the relationship between partners seemed to have been one of the requirements for a successful partnership. One interviewee commented:

In PPPs, you don’t deal with your partner in a way that you dominate him or exert your power and will on him. Matters of concern have to be dealt with and settled down by the agreement of both partners. No one party should behave and act in a way that puts the interests of the other party at stake. Everybody involved in any partnership should understand this well (S2.6/Pt).

In addition to the equality and trust that governed the relationship between partners, another public partner manager expressed his views about the commitment of his private partner to the partnership. He said:

Whether to trust the other partner or not is not an option here. It is a must. Frankly speaking, our private partner has good and sincere intentions in his dealings with us. He is always keen to do the right thing. This is a 25-years project, during which the private partner is mainly responsible for the operation, maintenance and whatever material and work invested in it, and as a result, making profit or bearing loss. That is a good reason for the private partner to do the right thing up to the best possible standards (S1.4/Pc).
The PPP managers perceived their IORs in view of having mutual/compatible goals. They also described their IORs as a win-win-type relationship that was based on equality, trust and commitment. Further, the project agreement was viewed as a regulator to their official relationships.

KF2.3: The IOR between partners was complementary relationship based on equality, trust and commitment by having mutual/compatible goals. The project agreement was viewed as a regulator of the partners’ formal IORs

A summary of key findings of RQ2.a which addressed the inter-organisational relationships between the PPP partners is presented in Table 4.15. The interviewees’ responses to this research question were organised under four themes, namely: the interaction purpose; frequency; media and methods; constraints; and, nature. Within each of these themes, a number of sub-themes emerged from the data. These themes and sub-themes were found to be closely linked to the nature of the inter-organisational relationships between partners of the Jordanian PPP projects.

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Findings</th>
<th>Citations</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 The interaction purpose</strong></td>
<td><strong>KF2.1:</strong> Communication between partners mainly aimed to discuss progress, coordinate activities and take decisions. This interaction took place on daily, weekly, monthly and ad hoc basis mostly through mail, phone calls and face-to-face communication.</td>
<td>15</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>To discuss progress</td>
<td></td>
<td>12</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>To coordinate activities</td>
<td></td>
<td>6</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>To take decisions</td>
<td></td>
<td>11</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Daily and weekly</td>
<td></td>
<td>11</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Ad hoc / any time</td>
<td></td>
<td>7</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td></td>
<td>15</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td><strong>2 The interaction frequency</strong></td>
<td><strong>KF2.2:</strong> Heavy workload, time and financial resources and coordination difficulties were the most common constraints that impacted on the frequency of interaction between partners</td>
<td>10</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td><strong>3 The interaction media / methods</strong></td>
<td><strong>KF2.3:</strong> The IOR between partners was complementary relationship based on equality, trust and commitment by having mutual/compatible goals. The project agreement was viewed as a regulator of the partners’ formal IORs</td>
<td>14</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Email, mail, telephone calls</td>
<td></td>
<td>12</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Direct communication</td>
<td></td>
<td>9</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Indirect communication (reports, the IEs)</td>
<td></td>
<td>6</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td><strong>4 The interaction constraints</strong></td>
<td></td>
<td>11</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Heavy workload</td>
<td></td>
<td>7</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Financial, time and other resources</td>
<td></td>
<td>10</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Coordination difficulties</td>
<td></td>
<td>9</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td><strong>5 The relationship nature</strong></td>
<td></td>
<td>15</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Complementary relationship</td>
<td></td>
<td>14</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Mutual/compatible goals and ends</td>
<td></td>
<td>12</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>'Win-win' relationship</td>
<td></td>
<td>10</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>The project agreement</td>
<td></td>
<td>8</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Equality</td>
<td></td>
<td>8</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Trust and commitment</td>
<td></td>
<td>8</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>
4.2.2 IOR Management

The following provides responses to the approaches that PPP partners used to manage their inter-organisational relationships, which represents research question RQ2.b:

**RQ2.b**: How well managed are the inter-organisational relationships (IORs) between PPP partners in Jordan?

The interviewees’ responses to this sub-research question that asked about the management approaches that were adopted by the PPP managers to manage their inter-organisational relationships is provided in Table 4.16. Five themes emerged from the data that addressed this research issue (the IOR management approaches).

<table>
<thead>
<tr>
<th>RQ2.b: Inter-organisational relationship management</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approaches in managing the IORs</td>
<td>Public SWWTP</td>
<td>Private QAIA</td>
</tr>
<tr>
<td>Working closely and continually with the partner</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Having a positive attitude</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Following the established channels of communication</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Engaging third party</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Learning by experience</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

As shown in Table 4.16 the most frequently mentioned approach to manage the inter-organisational relationships between partners was working closely and continually with the partner (with 62% of citations). This involved regular and frequent interface between partners and keeping them informed and updated with the progress of the project. According to the PPP managers, working closely with the other partner was achieved by continuous and open channels of communication between them. One public partner manager gave the following comment about the importance of the continuous communication with the partner:

The level and the extensiveness of the information released to the other partner should be very high in the details and depth. The ongoing, open and continuous dialogue with the partner has proved to be an efficient strategy to keep up the good relations. Also, sitting together and trying to listen to and understand the worries of the other partner and his
Having a positive attitude to the relationship with the other partner was also frequently mentioned by the PPP managers as another important approach they had, that kept the relationship between them well-maintained (mentioned 58%). For the PPP managers, having a positive attitude in dealing with the other partner meant being ready to develop mutual solutions, being flexible and open-minded, ready to compromise, and having good intentions. According to the interviewees, good intentions involved having transparent, trustful, respectful and equal dealings with the other partner and allowing information exchange and transfer between them. In this regard, one interviewee expressed his thoughts as follows:

I believe that the equality in dealing with the other partners is the key to a successful relationship. Also, the relationship should be based on trust and good intentions by doing the right thing. It is a win-win relationship. Partners like a group of people travelling on one boat. If the boat gets punched, then the life of everybody on board is at risk. Exactly like players in a soccer team. Each has a different role to play, but altogether shoot to the same direction (S2.7/Pt).

Yet, following the established formal channels of communication, engaging a third-party and learning by experience were other approaches that partners experienced that had a significant positive impact on the relationships between them (cited 52%, 34% and 33% respectively). The project agreement and the enclosed detailed project plans, the Memorandum of Understanding (MoU) and the structured, systematic reporting procedures were mentioned by the interviewees as important regulators in maintaining the official relationships between the PPP project managers. As explained by one manager:

Each partner should be familiar with the consortium agreement and the MoU signed by all parties involved in the project, as well as the project contract and its detailed plans. These all include details on how the relationships between partners are organised and regulated (S2.6/Pt).

The interviewees suggested that involving financial, technical and legal advisors, as well as IEs helped the PPP managers maintain their inter-organisational relationships. Further, the PPP managers suggested that IORs between them had continually developed and become mature over time and the ongoing experience of dealing with each other. Also, PPP managers explained the impact of the accumulated experience of
partners working together on the relationship between them and the role that advisors and the IEs played in sorting out issues that needed specialised expertise as follows:

By time, we got to know each other, and many issues we handle friendly and inter-personally. However, partners refer the issues that are of financial, technical and legal complications to their advisors, consultants and IEs who are specialised in these matters (S2.2/Pc).

In summary, despite the interaction constraints between partners mentioned previously, the PPP managers adopted several approaches to maintain their inter-organisational relationships. Among the most effective approaches were working closely with the partner, following the established channels of communication between them, involving third-party and learning by experience by partners working together.

A summary of key findings for RQ2.b which addressed the inter-organisational relationships management approaches that PPP managers adopted to maintain an effective working relationship is presented in Table 4.17. The interviewees’ responses to this research question resulted in five themes. These themes were found to be closely linked to the effective management of the inter-organisational relationships between partners of the Jordanian PPP projects.

Table 4.17: Summary of the key findings for RQ2.b:
(The inter-organisational relationship management between partners)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Findings</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working closely and continually with the partner</td>
<td><em>KF2.4:</em> Working closely and continually with the partner, having positive attitude, following the established channels of communicating, engaging third-party and learning by experience were the most effective approaches that PPP managers adopted to manage their IORs</td>
<td>13 62</td>
</tr>
<tr>
<td>Having a positive attitude</td>
<td>12 58</td>
<td></td>
</tr>
<tr>
<td>Following the established channels of communication</td>
<td>11 52</td>
<td></td>
</tr>
<tr>
<td>Engaging third party</td>
<td>7 34</td>
<td></td>
</tr>
<tr>
<td>Learning by experience</td>
<td>7 33</td>
<td></td>
</tr>
</tbody>
</table>

To conclude, the interviewees’ responses to the second research question RQ.2 provided detailed knowledge and better understanding about the environment in which IORs in Jordanian PPPs are managed during the implementation phase. Specifically, it
elucidated the content, context and nature of the IORs between PPP partners and the management approaches that the Jordanian PPP managers adopted to maintain their IORs.

A summary of key findings of RQ2 is presented in Table 4.18. The following section investigates the context in which inter-organisation culture (IOC) in Jordanian PPPs is managed and presents the study findings about the nature and management of the IOC in PPP settings.
Table 4.18: Summary of the key findings for RQ2 (Inter-organisational relationship environment)

<table>
<thead>
<tr>
<th>Key Findings of RQ2.b (The IOR between PPP Partners)</th>
<th>KF2.1</th>
<th>Communication between partners mainly aimed to discuss progress, coordinate activities and take decisions. This interaction took place on daily, weekly, monthly and ad hoc basis mostly through mail, phone calls and face-to-face communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>The interaction content (purpose, frequency and media/methods)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KF2.2</td>
<td>Heavy workload, time and financial resources and coordination difficulties were the most common constraints that impacted on the frequency of interaction between partners</td>
<td></td>
</tr>
<tr>
<td>The interaction context (constraints)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KF2.3</td>
<td>The IOR between partners was based on equality, trust and commitment by having mutual/compatible goals. The project agreement was viewed as a regulator of the partners’ formal IORs</td>
<td></td>
</tr>
<tr>
<td>The relationship nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Findings of RQ2.c (The IOR Management)</td>
<td>KF2.4</td>
<td>Working closely and continually with the partner, having positive attitude, following the established channels of communicating, engaging third-party and learning by experience were the most effective approaches that PPP managers adopted to manage their IORs</td>
</tr>
<tr>
<td>Approaches in managing the IORs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3 FINDINGS RELATED TO THE INTER-ORGANISATIONAL CULTURE (IOC) FRAMEWORK

The inter-organisational Culture (IOC) framework involves providing answers to the following main research question:

RQ.3: What is the context in which inter-organisational culture (IOC) in Jordanian PPPs is managed?

This research question consists of the following three sub-research questions:

RQ3.a: How compatible is the inter-organisational culture (IOC) in the Jordanian PPP settings?
RQ3.b: How well managed is the inter-organisational culture (IOC) between PPP partners in Jordan?
RQ3.c: What are the characteristics of the inter-organisational culture (IOC) that exists between partnering organisations?

4.3.1 IOC Compatibility

The following provides responses for RQ3.a (the compatibility of the inter-organisational culture):

**RQ3.a: How compatible is the inter-organisational culture (IOC) in the Jordanian PPP setting?**

The data collected that addressed the inter-organisational cultural differences between PPP organisations (e.g. the incompatible aspects) was organised under two main themes: the cultural differences; and, their impact on the PPP management. Within the first theme, two sub-themes emerged that identified the cultural differences between the partnering organisations, namely: the way of viewing and doing things (cited by 52% of the interviewees); and, communication differences (mentioned by 48% of the interviewees). In the second theme, one sub-theme emerged that explored and explained the impact of the cultural differences between the partnering organisations on the management of PPPs. The impact of the cultural differences on PPP management was
found to be limited (cited by 76% of the interviewees). The interviewees suggested that the limited impact of their cultural differences was due to a number of factors. These were: their awareness and experience of the cultural differences (cited by 76% of the interviewees); mutuality of objectives (cited by 66% of the interviewees); and, the positive working environment (cited by 62% of the interviewees). A summary of the cultural differences between PPP organisations and their impact on PPP management is presented in Table 4.19.

**Table 4.19: IOC differences and their impact on PPP management**

<table>
<thead>
<tr>
<th>RQ3.a: IOC differences and their impact</th>
<th>Frequency (%)</th>
<th>Total % of interviewees citing the theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>1 The IOC differences (the incompatible aspects)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 The way of viewing and doing things</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>2 Communicational differences</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>2 The impact of the IOC differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Limited impact, due to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Awareness and experience of the cultural differences</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>2 Mutuality of objectives</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>3 The positive working environment</td>
<td>10</td>
<td>19</td>
</tr>
</tbody>
</table>

**The IOC differences (the incompatible aspects)**

PPP managers acknowledged the incompatibility (e.g., difference) in the inter-organisational culture between their partnering organisations in relation to the differences in the way of doing things. The interviewees mentioned that such differences included the way each partner thought and viewed certain PPP issues, the way activities were prioritised and the details of the work to be done. Similarly, the interviewees pointed out other cultural differences between partnering organisations such as management approaches, perspectives and orientation and focus. The PPP managers related these differences to the fundamental differences that usually and normally exist between the public and private sector organisations. One partner manager commented:

There were quite a few occasions where we disagreed because of this [the way of doing things]. For example, we had a dispute with our public partner around the way the construction works on the site should take place and activities should be prioritised and accomplished ($1.10/Pt).

Another partner manager commented on the same issue:
We, as public partners, cannot discuss any issue far from thinking about its social and sometimes, political consequences as compared to our private partners who are mainly commercially-driven (S1.3/Pc).

The difference between partners in the way of viewing and doing things was not only limited to the inherent differences between the public and private sector organisations. It was also between organisations with the same partner (private or public). One interviewee mentioned an example of these differences:

We have to deal with French, Americans, British, Germans, Swedish and other nationalities. In fact, there is a big difference in the way of thinking and doing things. The Americans, for example are very sensitive towards red-tape procedures but more flexible to any changes. The British are less flexible to any changes, and would like things to go exactly as planned, which unfortunately does not happen always in such sophisticated giant projects. The mentality and orientation of each partner is a bit different (S2.10/Pt).

As mentioned by one of the interviewees, such cultural differences arose even between the organisations that formed the consortium that represented the private partner. He explained:

Unavoidably, cultural gaps will always arise, especially in multi-national projects of this scope/nature. In the QAIA, for example, we have three Middle Eastern investment companies from UAE, Kuwait and Jordan, as well as three European investors from France, Greece and Cyprus ... culture and language are the most obvious hurdles to overcome, however there are also fundamentally different views or approaches to business within each of these six companies, as they are a mix of purely private, to sovereign wealth to recently divested/privatised state-owned enterprise (S1.8/Pt).

The interviewees also mentioned that the differences in communication between PPP partners were among the most significant differences they experienced especially at the beginning of the PPP project. The language and understanding difficulties that the PPP managers occasionally faced in their interaction with each other were examples of the cultural differences that mainly stemmed from the inexperience of partners previously working together as explained by one of the interviewees:

Although English is the agreed upon communication medium between us, we had occasions at the beginning of the project where the contractor spoke in French when it came to an issue of critical or sensitive nature. Also, we are more indirect in the way we communicate our thoughts compared to their way which is usually direct, to the point and involves explicit meaning (S2.1/Pc).
Another interviewee elaborated further on the communication difficulties between partners due to language differences as follows:

The project contract, memorandum, addendum and correspondence between us are all in English. As such, we had to communicate in English, but the people representing the MWI did not have an advanced level of English to cope up with the highly advanced level of the language and terminology used in the communication to help in discussing certain issues. Besides, the project designers are French while most of the people on site are Arabic speakers. Also, remote communication with some other partners is time consuming (S2.7/Pt).

To conclude, differences of understanding among partners about the way things should be prioritised and done and the communication differences, were the main aspects of the cultural differences between PPP partners.

The impact of the IOC differences

Despite the cultural differences that were acknowledged by the PPP managers, they insisted that such differences had little impact on the management of their PPP organisations. Thus, they related this weak influence to a number of factors. Among these was their awareness and experience of these cultural differences. One manager commented:

Our private partners, mainly the French, have international and regional experience in accomplishing similar projects in the region. They have constructed similar airports in Egypt, Algeria and Saudi Arabia. So, they are aware and quite familiar with the Middle Eastern culture (S1.1/Pc).

The PPP managers strongly confirmed that they were aware of the cultural differences even before they joined their PPP projects. Many of them had previously been exposed to similar working and cultural environments and many others had received cultural training before they joined their PPPs. Besides, the PPP managers exchanged their cultural experiences with their colleagues. As such, and as mentioned by the interviewees, much of the cultural differences diminished with time, experience of
At the beginning of the project, there were occasions where we misunderstood each other. I regard this as a normal thing to happen. But by time, we learnt how to handle this sort of things. I can tell you that now we have much better understanding than ever before (S2.1/Pc).

Another interviewee commented on the familiarity of culture as follows:

Our private partners are culturally well-oriented. They have been to similar projects in Egypt, Lebanon and Libya. In fact, it is all about business and professional way of doing things. There is however some differences in the orientation and focus among partners and that is normal. Every partner in this partnership is there for a reason (S2.2/Pc).

A third interviewee gave two examples of the cultural differences between them as partners, that they overcame with time and experience of working together:

You know, we like to take our time in the negotiation with our partners around certain issues before we get to an agreement. In the beginning, our partners were impatient and liked things to happen so quickly. We explained to them our way of making things happening; slowly and steadily, but the thing that they don’t have to rush it. Now they understand this and even told us that they started enjoying ‘chewing’ things over and over! Another example is the perception of the time. You know we are usually not strictly punctual in our timing, for example in turning up to the meetings. We are aware of this and we get to the meetings even earlier that they do (S2.3/Pc).

So, both public and private partners were aware of the potential cultural differences between their organisations before they joined their partnership. However, it was important for them to experience working together to identify the gaps (or the incompatible aspects) between their organisational cultures and develop shared understanding and deeper knowledge of the cultural sensitivities and differences between their organisations.

Having mutual objectives and a positive working environment was an argument that was previously mentioned by the interviewees as evidence to support their description of the nature of their inter-organisational relationships. This has emerged as evidence mentioned by the PPP managers to describe the weak influence of the cultural differences between their organisations and the management of PPPs. Specifically, sharing the same objectives meant for the PPP managers a shift in their focus from the
details of their cultural differences to the broader view of seeing themselves achieving the goals and objectives of their PPP projects. In this regard, one of the interviewees made the following comment:

It was more important for us to work hard to see this project up and running, no matter how different we were. And no matter what differences we had, cultural or whatever, as far as we had the same goal to achieve; again, that was, to complete this project successfully (S2.7/Pt).

Another manager commented on the good intentions of his partner to do the best to achieve the goals of the project in the context of the positive relationships between partners:

You need to know that our private partner would like to do things in the best way possible. They don’t have any other intentions but to do so. We altogether work towards one end. That is; to construct and operate a modernised, contemporary, up-to-date and up to standards airport that offers an excellent service to the end users and generates a profit. Apart from this, there is always room for compromises and a way out (S1.1/Pc).

Likewise, as stressed by the PPP managers, the positive working environment that they experienced decreased the likelihood of the impact of the cultural differences on the management of the PPPs. According to the PPP managers, having good intentions and keenness to do things the best way possible, resulted in them developing mutual understanding and solutions to the cultural differences between them. A private partner manager explained:

We trust each other, and we have to. Maybe because of the nature of the project. All parties have one goal to achieve which is to carry out the project according to the agreement. We are all working together towards a state-of-the art, up and running airport as an end to this project. True they have their own concerns to get a good service, and we too have our concern to get paid fairly and make profit. And that is okay. A successful project means achieving everyone’s goals. That is it. Very simple! (S1.7/Pt).

To summarise, the IOC differences between partners had little impact on the performance of the PPPs, due the awareness of the cultural differences, mutuality of objectives and the PPP positive working environment that the PPP managers experienced during the course of the PPP projects. Most importantly, these factors outweighed the IOC differences.
A summary of key findings of RQ3.a, which addressed the inter-organisational cultural differences between PPP organisations (e.g. the incompatible aspects) is presented in Table 4.22. The interviewees’ responses to this research question were organised under two themes including the IOC differences and the impact of these differences on the management of PPPs. Within the first theme that represented the IOC differences, two sub-themes emerged from the data that addressed this issue. These were: differences in the way of doing things; and, communication differences. The second theme represented the impact of the IOC differences, one sub-theme emerged which was the limited impact of the IOC on the PPP management. Within this theme, three more sub-themes emerged that explained the limited impact of the IOC differences, namely: awareness and experience of the cultural differences; mutuality of objectives; and, the positive working environment. These themes and sub-themes were found to be closely linked to the effective management of inter-organisational culture in the researched PPP organisations.

4.3.2 IOC Management

The following provides responses for RQ3.b (the management of the IOC):

**RQ2.b: How well managed is the inter-organisational culture (IOC) between PPP partners in Jordan?**

The interviewees’ responses to this research question that addressed the management of the inter-organisational cultural differences between PPP organisations (e.g. the management of the incompatible aspects) resulted in a number of themes representing the approaches or strategies that the PPP managers adopted to manage the impact of the cultural differences between their PPP organisations. These approaches were (in descending order of citations): acknowledgment and acceptance of cultural differences; neutralisation of culture; flexibility and adaptability; continuity of interaction and cooperation; third-party arbitration and intervention; self and others orientation; and,
Managing PPP infrastructure projects in Jordan

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adopting a contingency approach. A summary of these approaches is presented in Table 4.20.

Table 4.20: Managing the impact of IOC differences

<table>
<thead>
<tr>
<th>RQ3.b: Managing the IOC differences</th>
<th>1</th>
<th>Acknowledgment and acceptance of cultural differences</th>
<th>19</th>
<th>24</th>
<th>19</th>
<th>19</th>
<th>38</th>
<th>43</th>
<th>81</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>Neutralisation of culture</td>
<td>19</td>
<td>19</td>
<td>14</td>
<td>19</td>
<td>33</td>
<td>38</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Flexibility and adaptability</td>
<td>24</td>
<td>14</td>
<td>14</td>
<td>19</td>
<td>38</td>
<td>33</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Continuity of interaction and cooperation</td>
<td>14</td>
<td>14</td>
<td>19</td>
<td>10</td>
<td>33</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Third-party arbitration and intervention</td>
<td>10</td>
<td>10</td>
<td>19</td>
<td>5</td>
<td>29</td>
<td>15</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Self and others orientation</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Adopting a contingency approach</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

Acknowledging and accepting the cultural differences between partners was the most frequent management strategy that the PPP managers adopted in the management of their PPPs (mentioned by 81% of the interviewees). According to the PPP managers, being aware of the cultural sensitivities was the first important step towards effective management of the cultural differences. Moreover, they confirmed that, within certain limits, the cultural differences between partners were acceptable as they were normal and unavoidable in many situations. One private partner manager suggested:

The difference between partners is always there. However, I believe this is a bit normal providing that it is happened without provocation (S1.6/Pt).

Many other interviewees acknowledged the cultural differences between partners in a PPP arrangement. They interviewees mentioned that they were aware that such cultural differences would only be resolved with time and experience of partnering together. However, many others mentioned that they were familiar with the organisational cultural environment of the other partner even before they joined the partnership. In this regard, one manager commented:

Personally, I’ve been exposed to different [organisational] cultures and aware of the cultural differences as I worked in similar projects inside and outside the country. Our company is following the policy of employing and deploying managers to manage the project from those who have knowledge of the social and cultural environment, those who are local managers or at least those who have worked before in similar projects regionally wherever possible. Also, some of our public partners have come from the private sector.
and we worked together in overseas projects before and met again in this project (S2.8/Pt).

Yet, another significant strategy that the PPP managers adopted to handle their cultural differences (with 71% of citations), was their attempt to neutralise the effect of cultural differences by focusing on more technical-objective values such as performance-based systems and procedures. Following the previously mentioned ‘scoping out’ approach, the PPP managers were able to move their attention away from the details of the cultural subjectivity to a broader view of having one goal to accomplish. A private manager explained:

I believe, many of the cultural differences can be addressed and resolved by following the friendly social approach, mixed with good organisational focus. That is by having business-sound management and social skills. Another way was to standardise the procedures applied within our two main companies, so that we refer to the same thing when we address and discuss any issue of concern (S1.8/Pt).

Another manager suggested:

Most of these differences can be technically addressed and resolved. One way is to get back to the basics: the project agreement. The Swedish advisors also were very helpful to support us in conflicting situations that needed legal, financial and technical advice. In situations where we could not resolve, we consult with the Jordanian Royal Scientific Society (RSS) for technical advice. At the end of the day, work needs to be done, and somebody has to do it (S2.6/Pc).

Equally important was the need to be flexible to adapt to situations where cultural differences prevailed. This was another strategy that the PPP managers adopted in managing their PPPs. They used this strategy in situations where cultural differences were unmanageable and unavoidable. For them, being flexible meant taking these differences as they were and looking inward to see if they could reorganise their internal management processes to adjust to these situations. One interviewee commented:

We also have different work systems than that of our public partner. The difference in the way we manage our organisations is not a matter of who’s right or wrong. The thing is that what does it mean to be different? And, whether that ‘different’ has negative effect on our relationship or the project, and if so, we only have to deal with this ‘different’ (S2.7/Pt).

The continuity of interaction and cooperation with the other partner was also a significant strategy that the PPP managers followed to resolve their cultural differences (cited by
62% of the interviewees). This was achieved by constant communication with the other partner through regular meetings, listening carefully to the concerns of the other partners and keeping them involved and informed. One manager made the following comment:

This is the third international PPP that I’ve been personally involved in ... cultural sensitivities differ, but the approach remains constant: meet regularly, listen carefully, don’t ‘evangelise’, show understanding, perseverance and patience (S1.10/Pt).

Lastly, the PPP managers mentioned other, although less frequent approaches, that they experienced and which had proved successful in addressing and handling the cultural differences within their PPP organisations. Seeking third-party help, orienting self and others on cultural issues and adopting a contingency approach in dealing with the cultural differences were all examples.

We try to orient them culturally whenever there is a need and opportunity to do so. We explain to them how it works to get things done from our part and the bureaucratic procedures that should be followed. We keep them well-informed about this, and they understand this (S1.1/Pc).

In conclusion, the PPP managers adopted several strategies to minimise the negative impact of the cultural differences between their organisations. Acknowledging and accepting these differences within normal limits was one of these strategies. Other strategies included adapting to cultural differences, and maintaining regular interaction with the partner.

A summary of key findings of RQ3.b, which addressed the management of the inter-organisation cultural differences between PPP organisations (e.g. managing the incompatible aspects) is presented in Table 4.22. The interviewees’ responses to this research question revealed a number of themes representing a number of approaches that the PPP managers adopted to effectively manage their IOC differences. These were: acknowledgment and acceptance of cultural differences; neutralisation of culture; flexibility and adaptability; continuity of interaction and cooperation; third-party arbitration and intervention; self and others orientation; and, adopting a contingency
approach. These themes were found to be closely linked to the effective management of inter-organisational culture in the researched PPP organisations.

### 4.3.3 The IOC Characteristics

The following provides responses for RQ3.c (the characteristics of the IOC):

**RQ3.c: What are the characteristics of the inter-organisational culture (IOC) that exist between partnering organisations?**

This research question sought to identify the characteristics of the inter-organisational culture in a PPP setting. The interviewees’ responses to this research question resulted in a number of themes representing the characteristics of the IOC in PPP settings, presented in Table 4.21.

**Table 4.21: Characteristics of IOC**

<table>
<thead>
<tr>
<th>RQ3.c: Characteristics of IOC</th>
<th>Public SWWTP</th>
<th>Private QAIA</th>
<th>Total Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Reciprocity</td>
<td>19 SWWTP</td>
<td>10 QAIA</td>
<td>43 SWWTP</td>
</tr>
<tr>
<td>2 Flexibility and responsiveness</td>
<td>14 SWWTP</td>
<td>14 QAIA</td>
<td>19 SWWTP</td>
</tr>
<tr>
<td>3 Respect</td>
<td>10 SWWTP</td>
<td>14 QAIA</td>
<td>19 SWWTP</td>
</tr>
<tr>
<td>4 Equality</td>
<td>5 SWWTP</td>
<td>14 QAIA</td>
<td>15 SWWTP</td>
</tr>
</tbody>
</table>

The IOC was consistently viewed by the interviewees as a reciprocal culture (with 72% of citations) where the inter-organisational relationships were based on mutual gains and multi-party outcomes. The reciprocal culture was also described by the interviewees as being based on give-and-get, win-win-type relationships.

It is about an equal and reciprocal relationship and no one party should dominate the other. That is because the interests and the benefits are shared. It is a ‘give and get atmosphere’, with communicative, flexible, reciprocal, complementary and different worlds with common objectives (S2.6/Pt).

Furthermore, the IOC was characterised by the interviewees as being flexible and responsive (mentioned by 43% of the managers). The cultural flexibility was described by the interviewees as being responsive to the changing environment, such as working
conditions, relations and methods that the partnership demanded. That is, by responding positively to these changes through adopting a range of strategies to minimise the reverse impact of the cultural differences. By the same token, the differences in culture between partnering organisations was received respectfully, deferentially and reverently by the PPP managers (with 43% of citations). As explained by one manager:

This culture is featured by being sensitive and responsive to the other partners’ needs. If you plan to do anything, you should think of the needs and concerns of the other partners. At the same time, you don’t want to lose your own identity and being throughout the different stages of this project (S1.6/Pt).

All the same, the interviewees (with 34% of citations) described the relationship environment between partners as being based on equality. One interviewee commented:

It is an equal relationship where no one partner should dominate, diminish, de-estimate or devalue the other partner. That is simply because we have the same interests and the benefits are shared, although our ways of doing things internally is quite different (S2.2/Pc).

Yet, other less frequent descriptions were given by the interviewees to characterise the inter-organisational culture between partners such as being extroverted, communicative, expressive and consultative. All the same, these descriptions explicitly refer to the positive partnership environment that was dominant between public and partners across the two case study organisations.

Table 4.22 provides a summary of key findings of RQ3.c, which sought to identify the characteristics of the inter-organisational culture in a PPP setting, is presented in . These themes were found to be closely linked to the characteristics of the IOC in the researched PPP organisations.
Table 4.22: Summary of the key findings for RQ3.a, b, and c: (IOC)

<table>
<thead>
<tr>
<th>Themes and Sub-themes</th>
<th>Key Findings</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>RQ3.a: IOC differences and their impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 The IOC differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The way of viewing and doing things</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
KF3.1: The PPP managers acknowledged the existence of inter-organisation cultural differences between their partnering organisations in the way of doing things and in communication | 11 52    |
| Communication differences            |                                                                            | 10 48    |
| 2 The impact of the IOC differences  |                                                                            |          |
| Limited impact due to:               | 
KF3.2: The IOC differences had little impact on the performance of the PPPs due to the awareness and experience of the cultural differences, mutuality of objectives and the PPP positive working environment | 16 76    |
| Awareness and experience of the cultural differences |                                                                            | 16 76    |
| Mutuality of objectives              |                                                                            | 14 66    |
| The positive working environment     |                                                                            | 13 62    |
| RQ3.b: Managing IOC differences      |                                                                            |          |
| Acknowledgment and acceptance of cultural differences | 
KF3.3: Acknowledging and accepting cultural differences, neutralising culture, adapting to cultural differences and maintaining constant communication with the partner were the most significant strategies that the PPP managers adopted to effectively manage their IOC differences | 17 81    |
| Neutralisation of culture            |                                                                            | 15 71    |
| Flexibility and adaptability         |                                                                            | 15 71    |
| Continuity of interaction and cooperation |                                                                            | 13 62    |
| Third-party arbitration and intervention |                                                                            | 9 44     |
| Self and others orientation          |                                                                            | 5 25     |
| Adopting a contingency approach      |                                                                            | 5 25     |
| RQ3.c: Characteristics of IOC        |                                                                            |          |
| Reciprocity                          | 
KF3.4: The inter-organisational culture (IOC) was viewed by the interviewees as different type of cultures, characterised by being reciprocal, flexible/responsive, respectful and equal culture | 15 72    |
| Flexibility/responsiveness           |                                                                            | 9 43     |
| Respect                              |                                                                            | 9 43     |
| Equality                             |                                                                            | 7 34     |

In summary, the interviewees’ responses to the third research question RQ.3 provided detailed knowledge and better understanding about the IOC context in the Jordanian PPPs during their implementation phase. Specifically, it elucidated the level of compatibility in the IOC and its impact on the management of the PPPs in Jordan, the management of the IOC incompatibility, and the characteristics of the inter-organisational culture in PPP settings. A summary of key findings of RQ3 is presented in Table 4.23.

To conclude, the interviewees’ responses to the research questions provided detailed knowledge and better understanding about the PPP management, the IOR environment and, the IOC context in the Jordanian PPPs during their phase of implementation. In the PPP management framework, the effective practices in managing PPPs, the difficulties
that faced their management, the institutional differences between PPP partners, the management expertise required in managing PPP projects, and the monitoring and controlling mechanisms used to oversee the progress of the PPP projects in Jordan were identified. In the IORs framework, the relationship between PPPs and their parent organisations, the IORs between PPP partners, and the IOR management approaches and strategies were explored. Lastly, in the inter-organisation culture (IOC) framework, the compatibility in the IOC and its impact on the management of the PPPs in Jordan, the management of the IOC incompatibility, and the characteristics of the inter-organisational culture in PPP settings were investigated.
**Table 4.23: Summary of the key findings for RQ3 (The inter-organisational culture context)**

<table>
<thead>
<tr>
<th>Key Findings of RQ3.a (IOC differences and their impact)</th>
<th>The IOC differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3.1 The PPP managers acknowledged the existence of inter-organisation cultural differences between their partnering organisations in the way of viewing and doing things and in communication</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The impact of the IOC differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3.2 The IOC differences had little impact on the performance of the PPPs, due to the awareness and experience of the cultural differences, mutuality of objectives and the PPP positive working environment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Findings of RQ3.b (Managing IOC differences)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3.3 Acknowledging and accepting cultural differences, neutralising culture, adapting to cultural differences and maintaining constant communication with the partner were the most significant strategies that the PPP managers adopted to effectively manage their IOC differences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Findings of RQ3.c (Characteristics of IOC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3.4 The inter-organisational culture (IOC) was viewed by the interviewees as different type of cultures, characterised by being reciprocal, flexible/responsive, respectful and equal culture</td>
</tr>
</tbody>
</table>


CHAPTER 4 SUMMARY

In this chapter, the study findings from two case study organisations in Jordan were presented. The chapter provided answers to the main and sub-research questions. Key findings on the management of public private partnerships (PPPs), inter-organisational relationships (IORs) and inter-organisational culture (IOC) were presented.

In the PPP management framework, key findings resulting from research question (RQ.1; KFs 1.1-16), which addressed the PPP management were presented. The current research has found that a number of areas involved the most effective PPP management practices (RQ.1.a) were closely related to effective PPP management in Jordan. Further, the difficulties that face the management in the implementation phase of a PPP in Jordan (RQ1.b), and the institutional differences between partners (RQ1.c), the type of management competency that was required to manage PPP-type projects (RQ.1d), the nature of the effective management and performance controls that PPP organisations put in place to oversee the progress of the PPP project (RQ1.e), were also found to be closely related to effective PPP management in Jordan.

In the IORs framework, key findings resulting from research question (RQ.2; KFs 2.1-4) which addressed the nature of the IOR environment were presented. The current research has found that a number of areas related to the content, context and nature of the interaction between PPP partners (RQ2.a) and the management of IORs (RQ2.b) were closely related to effective PPP management in Jordan.

In the IOC framework, key findings emanated from answering research question (RQ.3; KFs 3.1-4) which addressed the IOC context. The current research has found that a number of areas related to the incompatible aspects of the IOC in Jordan and their impact (RQ3.a), managing these incompatible aspects (RQ.3.b) and the nature and characteristics of the IOC culture in the Jordanian PPP context (RQ.3.c) were closely related to effective PPP management in Jordan.

Chapter 5 presents a discussion of the key research findings. It integrates and links the findings from Chapter 4 to the extant literature on PPP management, IORs and IOC.
CHAPTER FIVE: DISCUSSION

INTRODUCTION

The key findings of the study were presented in the previous chapter (Chapter 4). In this chapter, the key findings of the study are discussed and related to the literature. This chapter includes three sections. In the first section, a discussion of the key findings for the PPP management framework is provided. In the second section, key findings for the inter-organisational relationships (IORs) framework are discussed. Key findings for the inter-organisational culture (IOC) framework are discussed in section three (see Figure 5.1). Chapter 5 concludes with a summary.

Figure 5.1: Chapter 5 structure

For purposes of consistency, Chapter 5 generally corresponds to the order of research questions as presented in the previous chapters, integrated with the key findings presented in Chapter 4. Each research question was displayed in a text box and key finding(s) relating to it is/are presented in tables that link key findings(s) to the
literature. Whenever deemed important, references from the interviews are mentioned as evidence supporting key finding(s).

This research addressed the following research questions:

RQ.1: How is the implementation phase of Jordanian Public Private Partnerships (PPPs) managed? (Key findings 1.1 to 1.16).

RQ2: What is the environment in which inter-organisational relationships (IORs) in Jordanian PPPs are managed? (Key findings 2.1 to 2.4).

RQ.3: What is the context in which inter-organisational culture (IOC) in Jordanian PPPs is managed? (Key findings 3.1 to 3.4).

The following is a discussion of the key findings (KFs 1.1-16) resulting from research question RQ.1, which addressed the PPP management framework.

5.1 DISCUSSION OF KEY FINDINGS FOR THE PPP MANAGEMENT FRAMEWORK

The PPP management framework involves a discussion of the key findings of Research Question 1 (and subsequent sub-research questions):

RQ.1: How is the implementation phase of Jordanian Public Private Partnerships (PPPs) managed?

The PPP management involved effective practices for managing PPPs, difficulties that face the management of PPPs, institutional differences between partners, management expertise required to manage PPPs, and monitoring and controlling mechanisms used to oversee the progress of PPPs.

5.1.1 Effective PPP Management Practices (RQ.1.a; KFs: 1.1-3)

The following discusses the key findings from RQ.1.a:
Managing PPP infrastructure projects in Jordan

Table 5.1 provides a summary of the key findings for this research question. It also highlights the newly emerging themes and those that reinforced earlier findings in the literature on the management of PPPs.

Table 5.1: Key findings for RQ1.a (PPP effective management practices)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF1.1: A number of human resource management practices were closely related to</td>
<td>Newly emerging</td>
</tr>
<tr>
<td>effective PPP management. Special attention was given by the private partner</td>
<td></td>
</tr>
<tr>
<td>to recruiting, training and developing the local labour force</td>
<td></td>
</tr>
<tr>
<td>KF1.2: Working closely with the other partner, a well-detailed project</td>
<td>Reinforced / Newly</td>
</tr>
<tr>
<td>agreement and using effective monitoring mechanisms were effective PPP</td>
<td>emerging</td>
</tr>
<tr>
<td>management practices</td>
<td></td>
</tr>
<tr>
<td>KF1.3: Having prior experience in managing PPP projects has proved to be an</td>
<td>Newly emerging</td>
</tr>
<tr>
<td>effective PPP management practice</td>
<td></td>
</tr>
</tbody>
</table>

Responses from RQ.1a revealed five main issues that have substantial positive impact on the effective management of a PPP as perceived by the interviewees in the study. These were: practices related to the management of human resources; working closely with the other partner; the project contract / agreement; monitoring the progress of the project; and, prior knowledge/experience in managing PPPs (as shown in Figure 5.2).

Figure 5.2: PPP effective management practices

As highlighted in Chapter 2, the current research views success as an important indicator or ingredient for effective performance. The PPP management literature addressed and viewed PPP effective practices as critical success factors (CSFs) that significantly contribute to the effective implementation of PPPs, in particular, those
factors that were directly related to the management of the implementation phase of a PPP development. Table 5.2 presents the PPP effective management practices identified in the PPP literature and the current research.

**Effective Human Resource Management (HRM) Practices (KF 1.1)**

Managing certain human resource management issues proved to be one of the factors that had a substantive positive impact on the effective management of PPPs. Particularly, special attention was given to local staff development and training. This can be explained by the management of PPPs being viewed by the PPP managers as a different form of management, and therefore, well-trained people were needed to effectively manage the PPP projects. Specifically, PPPs are described by many researchers (Jones & Noble, 2008; Pessoa, 2008; Mandell & Keast, 2008; Hodge & Greve, 2007; Schaeffer & Loveridge, 2002; Siemiatycki, 2010; Vining & Boardam, 2008; Keast et al, 2004; Teisman & Klijn, 2002; Lasker, Weiss and Miller, 2001; see also Table 5.22) as well as the interviewees, as mega projects with long-term arrangements that have more technical, managerial and financial sophistications than those of traditional single-owned projects. Further, managing PPPs as a form of hybrid arrangement is referred to as ‘third door’ in administration technology, one that is related to, but distinct from public and private administration (Grossman, 2010). Additionally, in managing international-type PPP projects, special attention should be given to the needs of different local, regional and international participants, most of whom have indirect contribution to the project. In Jordan particularly, PPPs were recently introduced to the Jordanian market (around mid-2003), and managers lack experience in managing such PPP-type projects. The knowledge and lessons that can be learnt from these research projects can be prominently utilised to start other projects with huge investment that the government of Jordan is currently planning in sectors such as energy, transport, municipal services, education, health, tourism and water sanitation, recycling and management (Executive Privatisation Commission of Jordan-EPC, 2010). This makes developing local staff a priority to serve the strategic, long-term sustainable objectives of the PPP market in Jordan.
Table 5.2: PPP effective management practices in literature and current study

<table>
<thead>
<tr>
<th>PPP Effective Management Practices</th>
<th>The PPP literature</th>
<th>The Current Study</th>
<th>Relation to the Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Findings</strong></td>
<td><strong>PPP Researchers</strong></td>
<td><strong>Findings</strong></td>
<td><strong>Relation to the Literature</strong></td>
</tr>
<tr>
<td>Identified ‘critical steps’ in developing a strategic plan for modern PPPs</td>
<td>Schmieg &amp; Climko (1998)</td>
<td>Effective human resources management practices</td>
<td>Newly emerging; the importance of developing the local human resources to take up the PPP management responsibilities more effectively in the long-term</td>
</tr>
<tr>
<td>CSFs for PPP implementation. Among these was the availability of PPP institutional / legal framework</td>
<td>Abdel Aziz (2007)</td>
<td>-</td>
<td>Little support for the importance of having PPP institutional / legal framework for PPPs to be effective</td>
</tr>
<tr>
<td>Open communication between partners and willingness to compromise were among those factors that contributed to the successful PPP implementation</td>
<td>Jacobson &amp; Choi (2008)</td>
<td>Working closely with the other partner</td>
<td>Reinforced these findings</td>
</tr>
<tr>
<td>Availability of a ‘ulysses’, well-defined contract was one of the important pre-requisites in developing a strategic PPP plan</td>
<td>Schmieg &amp; Climko (1998); Harris (2004)</td>
<td>The importance of the project agreement</td>
<td>Reinforced; the project agreement had served as a critical factor in the effective PPP management</td>
</tr>
<tr>
<td>The importance of establishing parameters for the PPP process to be efficient</td>
<td>Ahadzi &amp; Bowles (2004)</td>
<td>Monitoring the progress of the project</td>
<td>Reinforced / newly emerging; using effective monitoring mechanisms was not limited to one partner.</td>
</tr>
<tr>
<td>Little research addressed the importance of having prior knowledge/experience as a pre-requisite for the effective PPP management. Further research was suggested to explore these requirements</td>
<td>Bach &amp; Whitehill (2008); Noble &amp; Jones (2006); Read (2008)</td>
<td>Prior knowledge/ experience in handling PPP issues</td>
<td>Newly emerging; knowledge and prior experience in managing PPP projects was one of the important factors that improved the abilities of the PPP managers to effectively manage their PPPs</td>
</tr>
</tbody>
</table>

Managing and developing human resources, particularly the local labour force, as an effective management practice was found to be more evident in the SWWTP than it was in the QAIA. This might be explained by the fact that the SWWTP was established earlier and therefore was at a more advanced stage of development and could have experienced these practices more often than was the case with the QAIA. Further, the effective human resource management practices were referred to significantly less often by the public partner managers compared to their private partner counterparts. It was evident that the private sector paid more attention to investing in the development of its human resources than the public sector. In addition, managing the construction and operational stages of a PPP project was the main responsibility of the private partner, and therefore, a specialised and well-trained labour force was needed to operate and run
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such mega projects with significant technological sophistication. It could also be because the private sector is usually more flexible in mobilising and allocating funds to the development and training of human resources, as access to funds is usually much easier than it is in the public sector organisations. Access to funds in the public sector organisations is usually constrained given the limited financial resources available in a developing country like Jordan. Besides, PPPs are new arrangements in the country and accessing financial resources is subject to obtaining approvals from internal and external bodies, especially if the need requires off-budget arrangements.

Other examples of human resource management practices that were found to have had substantial positive impact on the effective management of PPPs included: recruiting employees locally; improving working conditions and awareness of health and safety issues for employees and local staff; and, promoting qualified nationals to prominent positions. The importance of developing local human resources to take up PPP management responsibilities more effectively in the long-run has added to what Schmieg and Climko (1998) suggested as being the ‘critical steps’ in developing a strategic plan for modern PPPs (see Figure 5.3). Besides, because PPPs are long-term arrangements, these practices help to have more sustainable PPPs in the long-term.

![Figure 5.3: Critical steps in developing a PPP strategic plan](source)

In the same vein, Abdel Aziz (2007) identified a number of principles that were considered important characteristics (or critical success factors- CSFs) for PPP implementation at the program level. Among these factors were the availability of PPP institutional / legal framework and policy and implementation units, perception of PPP objectives and performance and method specifications. The findings of the current research did not provide enough evidence to support the importance of having a PPP
in institutional / legal framework for PPPs to be effective (or successful). Reference, by the interviewees, to the institutional and legal framework that can support the implementation of the PPP projects was uncommon/less frequent. This can be explained by the fact that the institutional and legal framework for PPPs in Jordan had not yet been fully established and was still in progress during the data collection.

Further, as mentioned earlier, the privatisation framework of what was known as Regulation for Implementing Privatisation Transaction, which included some clauses detailing the implementation of PPPs, was only drafted in 2008. In addition, the project agreement that partners conformed to, during the course of the project implementation, as discussed later, might have worked as a substitute for the institutional and legal framework. However, the public partner in both of the case study organisations had established a specialised entity\textsuperscript{41} to oversee the management of the PPP project before they had commenced. Further, the findings of this study has provided evidence to support the importance of perception of objectives and availability of performance method specifications that were suggested by Abdel Aziz (2007) as CSFs for PPPs. Reference to these principles (factors) is highlighted in other contexts later in this chapter.

Other Effective PPP Management (HRM) Practices (KFs 1.2-3)

In the research, both partners agreed that regular interaction with the other partner to discuss progress and coordinate activities was one of the most successful practices in the management of PPP projects. Working closely with the other partner entailed coordination of activities between partners using committees to address and synchronise a particular course of action. In the PPP literature, Jacobson and Choi (2008) identified several important factors that contributed to the successful implementation of PPPs. They confirmed that open communication between partners and their willingness to compromise and respect each other along with having clear roles and responsibilities were among those factors. Therefore, the current research supports Jacobson and Choi’s (2008) findings.

\textsuperscript{41} In the SWWTP this was called the Program Management Unit (PMU) which had semi-autonomous status in relation to the Ministry of Water and Irrigation (MWI), whereas in the QAIA, this unit was part of the organisational structure of the Ministry of Transport (MoT) to which it related.
Similarly, the project agreement that included a detailed description of roles and responsibilities for each partner had served as a critical factor in the effective management of the studied PPP projects. This also reinforced Schmieg and Climko’s (1998) and Harris’ (2004) suggestion to have a ‘Ulysses’, well-defined contract that details the relations, roles and responsibilities of the partners as one important prerequisite in developing a strategic plan for modern PPPs. Harris (2004), reflecting on the UK PPP experience, identified the availability of a PPP contract as one of the six critical success factors (CSFs) to the implementation of PPPs that were directly related to the program-level.

Yet, using effective monitoring techniques to oversee the progress of the project emerged in the current research as one of the important effective practices in managing PPPs. Ahadzi and Bowles (2004) pointed to the importance of establishing parameters for the PPP project as an example of the technical capabilities (among other attributes such as organisational and financial capabilities) that affected the efficiency of the PPP process in the UK, particularly in relation to the public partner. In the current research, however, using effective monitoring mechanisms was not limited to one partner. Both partners, public and private, believed that these techniques were essential to assist them in ensuring whether the progress achieved was in line with the agreed-upon plans. The details of the monitoring techniques used by the Jordanian PPPs are further discussed later in this chapter.

With regard to the prior experience in managing PPPs (KF 1.3), many PPP researchers (i.e. Acar, et al., 2007; Bach & Whitehill, 2008; Noble & Jones, 2006; Read, 2008) stressed the importance of the availability of management skills to effectively manage PPPs. However, very little research provided details about the type of prior knowledge/experience needed to effectively manage PPP projects. That is why Bach and Whitehill (2008) and Noble and Jones (2006) have suggested that further research is needed to explore the requirements for effective PPP management practices, and kinds of skills and experiences needed to manage in a PPP setting. Likewise, the Annual National Audit Office (NAO) Conference in the UK in July 2008, raised concerns about the unavailability of the right number of staff with appropriate experience to manage multimillion pound projects in the long-term (Read, 2008).

42 e.g. to have a contingency plan for the unexpected circumstances and to keep focused on the mission.
In the current research, knowledge and prior experience in managing similar PPP projects was found to be one of the important factors that improved the abilities of the PPP managers to effectively manage their PPPs. However, for the private sector managers, prior experience, although important, was not an issue of concern as most of the managers have already had the opportunity to work on similar regional and international PPP projects. The public partner managers were also aware of the importance of having prior PPP management experience and compensated for the lack of experience for some of the managers by providing them with training and induction programs, locally and internationally.

To conclude, in answering RQ1.a, the current research suggests five main issues that had substantial positive impacts on effective management of PPPs in Jordan. These were: practices related to the management of human resources; working closely with the other partner; the project contract/agreement; monitoring the progress of the project; and, prior knowledge/experience in managing PPPs. The present study extended the extant PPP literature in regard to: the importance of developing local staff to take up the PPP management responsibilities more effectively for achieving more sustainable long-term objectives; using effective monitoring mechanisms to oversee the progress of the PPP projects was not limited to one partner; and, knowledge and prior experience in managing PPP projects as one of the important factors that improved the abilities of the PPP managers to effectively manage their PPPs. Concurrently, open communication between partners and their willingness to compromise and the importance of the project agreement reinforced the extant PPP literature as critical factors that contributed to effective PPP management. However, there was little support for the importance of having a PPP institutional/legal framework in order for PPPs to be effective.

### 5.1.2 The PPP Management Difficulties (RQ.1.b; KFs: 1.4-8)

The following is a discussion of the key findings resulting from RQ.1.b:

**RQ.1.b: What are the difficulties facing the management of PPPs in Jordan?**
Table 5.3 provides a summary of the key findings for this research question. It also highlights the newly emerging themes and those that reinforced the literature on the management of PPPs.

### Table 5.3: Key findings for RQ1.b (PPP management difficulties)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Internal management difficulties</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.4: Certain human resource issues, such as staff shortages in quantity and quality, especially at the beginning of the PPP project, were difficult to manage</td>
<td>Newly emerging</td>
</tr>
<tr>
<td>KF1.5: Public partner managers lacked sufficient knowledge and experience in managing their PPP projects at the beginning of the project</td>
<td>Newly emerging</td>
</tr>
<tr>
<td><strong>2. External management difficulties</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.6: The unexpected circumstances that imposed changes to the project’s structure with the absence of an agreed upon plan to handle the changing conditions were obstacles in the management of PPPs</td>
<td>Reinforced</td>
</tr>
<tr>
<td>KF1.7: Pressures imposed by external sources had substantial impact on the management of PPP projects</td>
<td>Reinforced</td>
</tr>
<tr>
<td>KF1.8: There were communication and coordination difficulties between partners in managing PPP projects</td>
<td>Reinforced</td>
</tr>
</tbody>
</table>

Responses/themes from RQ.1.b revealed two main categories of difficulties that faced the management of the Jordanian PPPs. The first category included two management difficulties that were related to the internal management processes of PPPs. The second category included three management difficulties that stemmed from external sources that had a substantial impact on the internal processes of PPPs (shown in Figure 5.4). As viewed by the managers of the researched PPPs in Jordan, the internal and external management difficulties had negatively affected the management of their PPPs.

### Figure 5.4: PPP management difficulties

The PPP management difficulties identified in the PPP literature and the current research are summarised in Table 5.4. Most of the difficulties that the PPP literature described were related to the IORs (discussed in further detail later in this chapter)
between partners, which therefore, posed external pressures on managers in managing their PPP projects. It can be argued that poor management of these situations can have a profound impact on the wellbeing of the PPPs and threaten their existence. The experience of the Sydney Cross City Tunnel (CCT) toll-way in Australia in 2006 suggested that lack of coordination between partners and changes to the project’s original design were among the most powerful factors that detrimentally affected the project.

The current research highlighted other difficulties beyond those identified by the PPP literature. In this research, the PPP managers consistently acknowledged the difficulties they experienced in managing the internal management processes of their projects. Lack of adequate quantity and quality of labour force, and lack of sufficient experience, were examples of such difficulties that had substantial impact on the way PPPs were managed, especially at the beginning of the PPP project. Since PPPs are new arrangements and given that the field of PPP is still emerging (Hodge & Greve, 2007; Neal, 2010; Schaeffer & Loveridge, 2002; Siemiatycki, 2010; Vining & Boardam, 2008), unique management and technical competence and experience were needed to effectively manage this type of inter-sectoral, multi-partnered organisation.

Table 5.4: PPP management difficulties identified in the literature and current study

<table>
<thead>
<tr>
<th>PPP Management Difficulties</th>
<th>The PPP literature</th>
<th>PPP Researchers</th>
<th>The Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Findings</td>
<td>Fox &amp; Butler (2004)</td>
<td>Internal difficulties</td>
<td></td>
</tr>
<tr>
<td>Poor level of partners’ engagement, competing ideologies, conflicts and poor decision making, lack of clarity on roles, lack of trust, inability to manage the ‘people issues’, and, poor performance management.</td>
<td>Johnston &amp; Gudergan (2007)</td>
<td>1. Difficulties in managing certain human resource issues</td>
<td></td>
</tr>
<tr>
<td>Difficulties in the technical-rational governance system, led to a breakdown in the social contract, through political risk.</td>
<td>Weihl (2008)</td>
<td>2. Lack of sufficient knowledge and experience in managing PPPs</td>
<td></td>
</tr>
<tr>
<td>The majority of researched PPPs were based on distrust, one-sidedness, reactive attitude, distanced relationships, split purposes and low connection.</td>
<td>Jones &amp; Noble (2008)</td>
<td>External difficulties</td>
<td></td>
</tr>
<tr>
<td>Absence of an authority figure or hierarchical structure to PPP. The spanners’ drive for personal success made the difference in sustaining PPP success.</td>
<td>Siemiatycki (2010)</td>
<td>1. The changing circumstances.</td>
<td></td>
</tr>
<tr>
<td>PPPs were inflexible long-term arrangements; hence, partners had prolonged conflicts that ended the partnership before the end of the contract.</td>
<td></td>
<td>2. External pressures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Coordination and communication</td>
<td></td>
</tr>
</tbody>
</table>
Very little was mentioned in extant PPP research about the internal management difficulties that managers can experience in managing their part of the partnership. This is an important contribution to the PPP literature in understanding the nature of the difficulties confronting the management of PPPs that policy makers and managers need to consider in establishing and managing such arrangements.

In addition to the internal management difficulties, the current research identified other types of difficulties that stemmed from external forces. Changing circumstantial conditions coupled with coordination and communication difficulties between partners were examples of these difficulties that exerted pressures on PPP managers and made the management of their PPPs more difficult (see Figure 5.5).

Figure 5.5: PPP internal and external management difficulties

In the researched projects, PPP managers were frequently confronted with situations where unexpected circumstances emerged that needed changes to the original design and construction processes of the project. This was due to the increasing demand on services (such as the case in the SWWTP), or due to an emergent need (such as the case in the QAIA), that urged one partner to issue a Request of Variation Order (RVO) for further extensions in the project design. However, the researched managers, being aware of these changes and flexible in dealing with such changing situations (along with other approaches they adopted, as discussed later in this chapter), assisted them in managing their PPPs more effectively.

The findings of the current research did not confirm the existence of all of the difficulties reported by other researchers in the field of PPPs. However, the difficulties that face the management of PPPs can be explained by a cause-effect relationship. Hence, the difficulties identified in the previous research can be viewed as a consequence of the effect that the internal and external difficulties identified by the current research can make. For example, this study suggests that the existence and
interplay between the internal and external management difficulties identified by this research can result in negative attributes of the relationships between partners such as distrust, one-sidedness, split purposes and distanced relationships that Weihi (2008) mentioned. Other examples of these negative attributes were poor levels of partners’ involvement, conflicts, poor decision making, lack of clarity of roles, trust and inability to manage the ‘people issues’ that Fox and Butler (2004) specified. Likewise, Jones and Noble (2008) explained that ‘spanners’ (PPP managers in this study) were left to deal with partnership difficulties with a more informal and a less organised and structured approach, driven by their personal motivation for success. It is assumed that an environment with prolonged unresolved internal and external difficulties, adding to it the absence of an agreed upon plan to handle such difficulties (KF1.6), may potentially result in poor performance management, and consequently, breakdown of the social contract and PPP failure, as previously mentioned by researchers (i.e. Siemiatycki, 2010; Johnston & Gudergan, 2007). See Figure 5.6.

![Figure 5.6: Impact of the PPP internal and external management difficulties](image)

In summary, most of the difficulties that have been identified in the PPP literature were related to external pressures and their impact on PPP management. The majority of previously researched PPPs experienced negative consequences such as (among others): poor level of partners’ involvement, competing and conflicting interests, poor decision making, role ambiguity, lack of trust, distanced relationships, and overall poor performance management. Siemiatycki (2010) particularly, argues that the international
experience has often been that PPPs are inflexible long-term arrangements in which, in many cases, conflicts between partners had ended the partnership before the end of the contract.

However, the current research, not only identified other types of difficulties stemming from external sources than those mentioned in the literature (i.e. the unexpected changing circumstances), but also provided a better understanding of the nature of the difficulties that PPP managers experience in managing their PPPs. Specifically, it has re-phrased/re-organised the cause-effect relationships between the internal and external difficulties that PPPs face during their implementation and the potential consequences of these difficulties on the effective management of these PPPs. Additionally, this study has extended the extant PPP literature about the existence of internal management difficulties and their significant impact on the overall outcome of the PPP performance management. Further, this study suggests that the existence of, and interplay between, internal and external management difficulties, with the absence of an agreed-upon plan to handle such difficulties, creates an environment of prolonged unresolved problems and potentially results in poor performance management and PPP failure.

5.1.3 Institutional Differences between Partners (RQ.1.c; KFs: 1.9-11)

The following is a discussion of the key findings that resulted from RQ.1.c:

**RQ.1.c: How well managed are the institutional differences between the partnering organisations in the Jordanian PPPs?**

To investigate the approaches that PPP managers adopted to manage the institutional differences between their partnering organisations, there was a need to identify the nature of these differences from the beginning. The data collected supported this approach, and led to further understanding of these differences and their impact on the management of PPPs. Table 5.5 provides a summary of the key findings for this research question and highlights the newly emerging themes and those that reinforced the literature on the management of PPPs.
Table 5.5: key findings for RQ1.c
(Institutional differences and their management approaches)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The institutional differences between partners</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.9: The institutional differences between partners included differences</td>
<td>Reinforced</td>
</tr>
<tr>
<td>in the internal decision-making processes, institutional orientation,</td>
<td></td>
</tr>
<tr>
<td>degree of flexibility, and, views</td>
<td></td>
</tr>
<tr>
<td><strong>Safeguards in limiting the impact of the institutional differences</strong></td>
<td>Newly emerging</td>
</tr>
<tr>
<td>KF1.10: The awareness of the institutional differences; having mutual</td>
<td></td>
</tr>
<tr>
<td>objectives and working towards the same ends, having a well-detailed</td>
<td></td>
</tr>
<tr>
<td>project agreement, and perpetuation of positive attitude served as</td>
<td></td>
</tr>
<tr>
<td>safeguards that limited the impact of the institutional differences</td>
<td></td>
</tr>
<tr>
<td><strong>Strategies adopted to manage the differences</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.11: Establishing effective communication, compromising and experience</td>
<td>Reinforced</td>
</tr>
<tr>
<td>accretion were among the approaches that partners adopted to manage their</td>
<td></td>
</tr>
<tr>
<td>institutional differences</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.7 displays the findings of the current research in answering research question RQ.1.c and demonstrates positive and negative effects on the effective management of PPPs.

The institutional differences between partners and their impact (KF 1.9 &1.10)

The institutional differences between partnering organisations are widely acknowledged by many PPP researchers (Klijn & Teisman, 2000; Teisman & Klijn, 2002; Klijn & Teisman, 2003; Mann, Pier & Yasin, 2007; Schaeffer & Loveridge, 2002; Tierney, et al., 2010; Vining & Boardam, 2008). Researchers in the field of PPPs identified several areas where organisations representing varying institutional frameworks differ. More importantly, previous PPP research has also acknowledged the substantial impact of
these differences on the performance management of PPPs. As such, many PPP researchers believed that it is rare for an opportunity to emerge where organisations with different organisational and structural backgrounds can work together in a partnership arrangement and produce effective results (see for example, Klijn & Teisman, 2000; Klijn & Teisman, 2003; Mann, Pier & Yasin, 2007; Schaeffer & Loveridge, 2002; Tierney, et al., 2010; Vining & Boardam, 2008). PPP researchers argued that partnership between organisations that have different organisational settings (such as the case with public and private sector organisations), these differences come into play in a way that challenges the core substance of the partnership.

Seeking to identify the nature of the differences between partnered organisations in the previous research has mainly aimed to examine the degree of the effect that these differences have on the synergistic, cooperative and collaborative efforts between partners as bases for any partnership to be successful. In particular, a number of PPP theorists believed that the proper management of these differences makes it possible for organisations to work together (e.g. Lasker, Weiss and Miller, 2001). Nevertheless, previous PPP research did not detail the context in which partners operate or interact (Klijn & Teisman, 2000) nor the content of this interaction that could lead to, or increase the gap between partners. As such, the current research has investigated this important issue and identified a number of areas where institutional differences between partners existed. It also examined the impact of these differences on the management of the researched PPPs, in an endeavour to fill the gap in the extant PPP literature in respect to this important issue. A summary of these differences as referred to in the PPP literature and in the current research is provided in Table 5.6.

As shown in Table 5.6, the current research confirmed the existence of the institutional differences between partnership organisations in ‘some’ of the areas mentioned in the PPP literature. However, the extent to which these differences impacted on the performance of the researched PPPs was limited in most of these areas (as explained latter). Exceptionally, two areas where institutional differences have potentially impacted on the management of these PPPs were: the differences in the internal decision making and taking processes; and the differences in expectations and views between partners.
### Table 5.6: The institutional differences between partnering organisations identified in the literature and current study

<table>
<thead>
<tr>
<th>Areas of Difference</th>
<th>The PPP literature</th>
<th>PPP Researchers</th>
<th>The Current Study</th>
<th>The impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophical, managerial and legal differences</td>
<td>Reflected in the way each is managed and views of cooperation</td>
<td>Schaeffer &amp; Loveridge (2002)</td>
<td>The internal decision processes</td>
<td>Occasional delays in taking decisions and project construction</td>
</tr>
<tr>
<td>Classical separation (market versus hierarchical structure)</td>
<td>Little joint planning and decision making; less cooperation; Unlikely to achieve synergy; May lead to inertia and interaction blocking</td>
<td>Klijn &amp; Teisman (2000); Klijn &amp; Teisman (2002); Klijn &amp; Teisman (2003)</td>
<td>The institutional orientation</td>
<td>Limited impact</td>
</tr>
<tr>
<td>Deterioration in relationships</td>
<td>Johnston &amp; Gudergan, (2007)</td>
<td>Differences in views</td>
<td>Potentially delayed the projects' construction</td>
<td></td>
</tr>
<tr>
<td>Likely to raise costs and management conflicts</td>
<td>Vining &amp; Boardam (2008); Klijn &amp; Teisman (2003); Klijn &amp; Teisman (2000)</td>
<td>Not supported</td>
<td>Having mutual objectives and ends</td>
<td></td>
</tr>
<tr>
<td>Reducing the ability of the private partners to be fully involved in the partnership</td>
<td>Mann, Pier &amp; Yasin(2007); Klijn &amp; Teisman (2000, 2002, 2003);</td>
<td>The degree of flexibility; Less mentioned</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Partners not ready to share their resources or power; They underestimate each other</td>
<td>Neal (2010); Mann, Pier &amp; Yasin (2007)</td>
<td>See the IOC section; Less mentioned</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Impedes transnational collaboration</td>
<td>Tierney et al. (2010)</td>
<td>See the IOC section</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

This study has broadly confirmed Schaeffer and Loveridge’s (2002) argument that differences between partnering organisations, due to their different philosophical, managerial and legal frameworks, affect the way each is managed, as well as, its views on the concept of cooperation. The researchers implied that these are real impediments to successful cooperative efforts and partnership arrangements. In the current research, differences in the internal management processes, particularly the reported bureaucratic procedures and inflexibility of the public sector partner, have resulted in delays in making and taking decisions and consequently delays to the construction processes in the QAIA project for eight months. The interviewees attributed the delay in the construction works to other reasons. The differences in views among partners about what sort of action to take to resolve a problem (in reference to the second area of the differences between partners; See, Johnston and Gudergan, 2007), the general financial
and investment climate in Jordan being unsupportive and the shortage of qualified labour force to work on the PPP project when it first commenced, were among those reasons. Confirming this, no further delays to the construction and operation processes for the two case study organisations were reported in the later stages of the development of these projects.

Yet another area where institutional differences can take place is what Klijn and Teisman (2000) called the ‘classical separation’ between partners with different organisational and structural foundations. In explaining the nature of this difference, PPP researchers highlighted the prominent differences between market (which reflects the structure of the private sector organisations) and hierarchical organisational structure (which reflects the way public sector organisations are structured) (Klijn & Teisman, 2000; Teisman & Klijn, 2002; Klijn & Teisman, 2003). Research in the field of PPPs suggested that this difference, when it yields different behaviours, can work against the effective performance of a partnership. As a result, partners tend to be less cooperative and experience less joint decision making in practice, which can jeopardise the whole idea of a partnership. While acknowledging the existence of the differences between partners based on their fundamental institutional orientation, the findings of the current research, however, indicated that the impact of these differences on the performance of the researched PPPs and the relationship between partners had been very limited. The managers interviewed, across the two cases, strongly and positively regarded the institutional differences between their organisations as a normal occurrence. They even went further to assume that these differences might have improved their PPP management performance. Although this is a somewhat different view as to these types of institutional differences, it finds resonance in the work of Lasker, Weiss and Miller (2001). In explaining their view of the partnership synergy, the authors used this logic to argue that, in partnerships, bringing together organisations from diverse backgrounds promotes the exploration of differences, ideas and new grounds for problem solving.

The degree of flexibility between public and private sector organisations was another area of institutional differences that was acknowledged by both partners in the current research. Unlike the private partner, the public partner was reported as being less flexible in responding to the unexpected changes that the PPP project needed. This supports the findings of Mann, Pier and Yasin (2007) that public and private sector
organisations have different ‘working rhythms’. While the public sector is apprehensive about the private sector’s fast tracking, the private sector is wary about the slowness of the public sector in action and its bureaucracy. In this context, Lasker, Weiss and Miller (2001), suggested that the PPP management should be able to exert flexible and supportive roles rather than being rigid and conforming to traditional and bureaucratic control systems. Again, the managers interviewed, while acknowledging these differences, underestimated their negative impact on their performance in managing their PPP projects or the relationship between partners. The PPP managers viewed these differences positively as they had to deal with them as *de facto* matters of which they were aware and previously experienced in other projects. As commented on by one of the private sector managers, “it is the system [the bureaucratic system] and the way the public sector is managed. We came to work together bearing this in mind .. We have been overseas .. working alongside our public partners within this [bureaucratic] environment” (S1.11/Pt).

Given that argument, it is also anticipated that other factors should have come into play, serving as safeguards that prevented (or at least) reduced the impact of the institutional differences between partners to a minimal level. In the case of the ‘classical separation’ and the degree of flexibility between partners, being aware of these differences and accepting them as they were, partners directed their efforts to handle their differences separately from the ‘private’ concerns of the other partner whenever possible, and that served as a safeguards that kept the impact of such differences to a reasonable level.

Additionally, the conflicts in goals between partners mentioned by Vining and Boardam (2008) did not find much support in the current research. On the contrary, the majority of the study interviewees believed that they had mutual goals to achieve and that they were working towards the same end to achieve a more successful partnership. Also, Klijn & Teisman (2000) and Klijn and Teisman’s (2003) argument that partners with different backgrounds who have conflicting rules stemming from their narrow and competing interests, were neither fully nor partially supported by the findings of the current research. Once again, well-detailed project agreement and perpetuation of positive attitude in the researched PPPs, served as safeguards that limited the impact of these types of institutional differences between partners (whenever they may have emerged). Adding to this, the approaches that PPP managers in Jordan adopted to
manage these differences might have been effective in the proper management of these differences (see Figure 5.8).

In conclusion, this research extends the PPP literature in detailing the context and content in which partners operate or interact which was not identified in previous research (e.g. Klijn & Teisman, 2000). It also identified a number of issues where institutional differences between partners existed and elucidated their impact on the management of PPPs.

This study has reinforced the findings in the literature on the impact of the differences in philosophical, managerial and legal frameworks between partners and their differences in views and expectations on the way each partner organisation is managed (e.g. Schaeffer & Loveridge, 2002; Johnston & Gudergan, 2007). Specifically, the degree of flexibility and the differences in the internal management processes, particularly the over-bureaucratic procedures and inflexibility of the public sector partner (e.g. Mann, Pier & Yasin, 2007), have potentially resulted in occasional delays to the construction process. However, this study has also supported the argument that successful partnership between partners that have diverse backgrounds is possible to achieve (e.g. Lasker, Weiss & Miller, 2001). Differences between partners, when they are accepted by partners and regarded as normal, can create a positive partnership environment and produce positive outcomes emerging from hybridisation of the differences that involve comparative advantages that each partner can bring to the partnership.

The current research, however, did not find much support for the assumption that partners had conflicting goals (Vining & Boardam, 2008; Klijn & Teisman, 2003; Klijn and Teisman, 2000) that stem from their individual sub-optimisation behaviour. It is suggested that the management safeguards and approaches that PPP managers in Jordan adopted have limited the impact of the institutional differences or the conflicts in interests and goals between partners (whenever they emerged) on the performance of the researched PPPs and the relationship between partners.
Managing the institutional differences (KF 1.11)

As mentioned earlier, some researchers suspected that PPPs can be successful arrangements even with the existence of the institutional differences between partnering organisations. Conversely, many others raised deep concerns about the negative effect that these differences might pose for the management of PPPs (see for example, Klijn & Teisman, 2003; Ramiah & Reich, 2006; Tierney et al., 2010; Mann, Pier & Yasin, 2007; Vining & Boardam, 2008).

Communication between partners was one of the most important factors that researchers assumed to have substantial impact on the performance of the PPP (see for example, Johnston & Gudergan, 2007; Jacobson & Choi, 2008; Tierney et al., 2010; Pessoa, 2008). As such, effective communication between partners is considered one of the most powerful requirements in the management of the institutional differences. As shown in Table 5.7, the findings of the current research support that assumption. Previous research on PPPs found a crucial link between establishing effective communication channels between partners to coordinate their activities and achieving PPP project goals (see for example, Jacobson & Choi, 2008; Pessoa, 2008; Tierney, et al., 2010). This is also evidenced in the case of the Cross City Tunnel (CCT) project in Sydney, Australia in 2007. Johnston and Gudergan (2007) and Siemiatycki (2010) noted that the lack of communication between partners during the course of this project resulted in deterioration in their relationships and intervention in the form of remedial actions being too late. In the same vein, the current research found that constant, assiduous and direct communication with the other partner was one of the most effective tools for managing the institutional differences between partners.

The findings of the current research also reconfirmed Jacobson and Choi’s (2008) suggestion that partners should be prepared to compromise and give concessions as one of the important factors that contribute to the successful implementation of PPPs. Similarly, the majority of the managers interviewed believed that compromising (e.g. give to get approach) was a strategy that they utilised and which proved useful, especially in situations where they anticipated that these differences might prevail and hinder the performance of their PPP project. The willingness to compromise was viewed by the interviewees as an exchange relationship where at times partners gave
concessions in exchange for getting better deals in their future interactions with their partners. In this sense, the logic of compromising is consistent with the logic of game theory proposed by McQuaid (2000). Game theory is based on the assumption that the interaction and cooperation between partners involves compromising and giving concessions to gain benefits in future interactions.

Table 5.7: Approaches in the management of institutional differences identified in the literature and current study

<table>
<thead>
<tr>
<th>Approaches in the Management of Institutional Differences</th>
<th>The PPP literature</th>
<th>The Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing effective communication</td>
<td>To coordinate activities for a more successful partnership</td>
<td>Establishing effective communication</td>
</tr>
<tr>
<td>Partners’ willingness to compromise</td>
<td>One important factor that contributed to the partnership success</td>
<td>Being ready to compromise to gain future benefits</td>
</tr>
<tr>
<td>Establish partnership as a learning process</td>
<td>Establishing mentoring relationships between experienced and less experienced partners; Developing and utilising mechanisms to learn more about the partnership</td>
<td>Using experience accumulation</td>
</tr>
<tr>
<td>A shift in roles and in the way of viewing and doing things; Flexibility</td>
<td>The public sector to develop new and innovative ways of management beyond the bureaucratic traditional styles</td>
<td>Putting in place special built-in safeguards to deal with differential situations</td>
</tr>
<tr>
<td>Partners’ mutual goals and clear roles / Responsibilities</td>
<td>Partners should agree on objectives and methods as well as a division of labour among them</td>
<td>Having mutual goals and the project agreement</td>
</tr>
</tbody>
</table>

In another vein, Tierney et al. (2010) demonstrated the importance of the accumulated experience in the interaction between partners in minimising or preventing their institutional differences. That is why they suggested establishing mentoring relationships between experienced and less experienced partners. Similarly, Ramiah and Reich (2006) suggested that accepting partnership as a learning process was one of the lessons learnt from the PPP health initiatives in Botswana from 2001 to 2005.
Partners in the PPPs researched had developed practical and efficient approaches through which they learnt by experience to minimise the effect of their institutional differences such as differences in their systems and procedures that reflect the way things are done, and broadly, the progress of the project. Establishing informal networks, starting the work plans and processes early and developing alternative plans to apply in different situational scenarios to assist partners get things done more efficiently, were all examples of these approaches.

The conclusion drawn from a number of PPP studies (as well as the current research), indicated that the public sector partner was less flexible in responding to the circumstantial situations that necessitate changes in the project plans and designs. In particular, the public sector is required to adjust to the new roles and make a shift in the way of thinking and doing things beyond the traditional bureaucratic management style (Keast, et al., 2004; Lasker, Weiss and Miller, 2001; Teisman & Klijn, 2002). Pessoa (2008) added that the private sector is also required to have a shift in roles and attitudes by assuming greater responsibility and risk in partnership beyond the traditional type of contractual relationships. In essence, partner managers in the current research acknowledged the differences between them in terms of the degree of flexibility and ways of doing and viewing things (as previously discussed). However, they tended to accept these differences by putting in place special built-in safeguards to deal with differential situations. Similarly, partners strongly and confidently agreed that they worked together closely to achieve their mutual goals within the framework of the project agreement that precisely specified the nature of their participation and responsibilities and that these together worked as safeguards that limited their institutional differences. This result supports Pessoa’s (2008) suggestion that there must be an agreement on objectives and methods, as well as a division of labour among partners to achieve the PPP project goals.

Finally, this research has responded to Klijn & Teisman’s (2000) call to conduct more research to explore the details of the context in which PPPs operate or interact and the content of this interaction that could lead to, or increase the gap, between partners. More specifically, the current research concluded that the extent to which the institutional differences impacted on the performance of the case study PPPs was limited in most of
the areas where these differences prevailed. The proper management of these differences, built-in safeguards, effective approaches in managing the differences and the positive working and relationship environment in the case study PPPs made it possible for them to work together more effectively (see Figure 5.8).

Figure 5.8: Safeguards and management strategies playing against institutional differences

The present study suggests that PPP effectiveness can potentially be determined by the extent to which the management approaches and the built-in safeguards are effective in eliminating the potential negative impact of the forces (caused by the institutional differences) on the overall performance of a PPP arrangement. Figure 5.8 shows that the safeguards and strategies that the PPP management of the researched PPP projects adopted were strong enough to limit the negative effect to an acceptable level.

To conclude, the current research corresponds with the assumption that effective communication is one of the most important factors that has substantial impact on the performance of PPPs and a powerful approach in managing the institutional differences between partners and achieving the partnership goals (i.e. Jacobson & Choi, 2008; Pessoa, 2008; Tierney et al., 2010; Siemiatycki 2010). The current research also reconfirmed Jacobson and Choi’s (2008) suggestion that partners should be prepared to compromise and give concessions as one of the important factors that contribute to the successful implementation of PPPs. The logic of compromising is consistent with the basic assumption of game theory which presumes that the interaction and cooperation between partners involves compromising and giving concessions to gain future benefits (see McQuaid, 2000). Additionally, partners in the researched PPPs have developed practical approaches that they have learnt by experience to minimise the effect of their institutional differences. This emphasised the suggestions given by Ramiah and Reich (2006) and Tierney et al. (2010) which view partnership as a continuous learning
process and the importance of partners’ accumulated experience in managing the institutional differences between partners more effectively.

The current research supports the argument that partners (particularly, the public sector partner) should be flexible and develop new and innovative ways of doing and viewing things. Additionally, partners should have common goals and clear roles to effectively manage their differences, as suggested by a number of PPP researchers (i.e. Keast et al., 2004; Lasker, Weiss and Miller, 2001; Teisman & Klijn, 2002; Pessoa, 2008). However, this research extends the extant PPP literature by suggesting that both partners are required to adopt effective approaches and develop and/or custom-tailor and implement practical built-in safeguards (such as the ones mentioned in this research) to effectively deal with situations of their differences that they may confront during the implementation phase of their PPP projects.

5.1.4 PPP Management Expertise and Competency (RQ.1.d; KFs: 1.12-15)

The following discusses the key findings from RQ.1.d:

Table 5.8 provides a summary of the key findings for this research question and highlights the newly emerging themes and those that reinforced earlier findings in the literature on the management of PPPs.

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal attributes and abilities</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.12: Adaptability and flexibility; ‘scoping in/out’ ability; and, patience and self-motivation are personal qualities and abilities were important for the PPP managers</td>
<td>Newly emerging</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.14: PPP managers should have sufficient technical and project management experience, as well as experience in negotiation and arbitration</td>
<td>Newly emerging</td>
</tr>
<tr>
<td><strong>Skills</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.13: A set of skills were important to effectively manage PPPs. These were: social and interpersonal skills; project management skills; and, communication skills</td>
<td>Reinforced / Newly emerging</td>
</tr>
<tr>
<td><strong>Knowledge, training and qualification</strong></td>
<td></td>
</tr>
<tr>
<td>KF1.15: PPP managers should be knowledgeable and qualified to manage the construction, operational and the financial aspects of the PPP project. They should also be familiar with, and use programming and scheduling techniques</td>
<td>Newly emerging</td>
</tr>
</tbody>
</table>
In the PPP literature, scholars were in agreement that PPP managers should possess necessary special skills and expertise as a requirement to effectively manage PPP-type projects. Concurrently, researchers questioned whether the skills in traditional command-and-control structures fit into a multi-organisational partnership environment, and whether any other sets of skills are instrumental in the management of PPPs (e.g. Acar et al., 2007).

In the meantime, a few researchers attempted to identify a number of skills that they considered crucial in managing PPPs. An example was the 9Cs\(^{43}\) that Acar et al. (2007) identified as important skills in managing PPPs. As a result of the interplay of two organisational context dimensions (flexibility versus control and internal versus external), Acar et al. (2007) also identified four categories of skills that PPP managers need. These included: boundary-spanning; human relations; coordinating; and directing skills. Other researchers emphasised the importance of collaborative leadership in bringing the right people, organisations and constituents together constructively to create vision, solve problems and reach solutions in PPPs (i.e. Hartman, Hufman & Stafford, 1999; Malmborg, 2003; Brown, O’Toole, & Brudney, 2004).

Despite the few attempts to give prescriptions of what ‘should be’ the ‘right’ or ‘special’ skills required to manage PPP-type organisations, it can be noted that little empirical research has been initiated to investigate whether these ‘special’ skills are what exactly required to effectively manage in a PPP setting in reality (see for example, Acar et al., 2007). In addition, these attempts did not provide a comprehensive account of the type of qualities, skills, experiences and knowledge that should be available to the PPP managers, that the current research provided (see Figure 5.9). That is why researchers called for further empirical research to explore the precise set of skills, values and attitudes needed to manage in multi-sectoral settings such as the case in PPP arrangements (i.e. Bach and Whitehill, 2008; Noble and Jones, 2006; Acar et al., 2007).

\(^{43}\) The 9Cs skills were: communication; connectivity; collaborative attitude/skills; convening /coordinating; congeniality/collegiality; caring for and championing clients; coaching /consulting; creativity; and, credibility.
Managing PPP infrastructure projects in Jordan

The type of personal qualities, experience, skills and knowledge that the current research identified can be divided into two main categories: the personal qualities, attributes and abilities that the individual PPP managers themselves have and can bring to their PPP organisations for more effective management; and the skills, knowledge and training that the PPP organisation can provide to the PPP managers to improve their performance in managing their organisations (represented in Figure 5.10). It is suggested here that the findings of the current research provided a wide-ranging account of the type of competency and expertise required for the effective management of the PPPs that was not available in the PPP literature. It responded to Bach and Whitehill’s (2008) and Noble and Jones’ (2006) call to explore the management expertise and competence in multi-organisational settings. Thus, this research adds to the 9Cs that Acar et al. (2007) identified, as well as extending the PPP literature in identifying the kinds of personal and professional competencies that managers need to more effectively manage in a PPP environment.

Broadly speaking, the current research reconfirmed the importance of communication, coordination and social and interpersonal skills (human relation skills in Acar’s et. al., 2007 model) that PPP managers should have to effectively manage their projects. In addition, the importance of having directing skills (e.g. leadership skills) that was highlighted by some PPP researchers was also emphasised in this study by stressing the manager’s ability to keep focused on the broader vision of the PPP project in the course of routine daily activities.
Overall, the current research identified, in detail, what can be considered as a personal attribute, experience, skill and/or knowledge that is important for the effective management of a PPP organisation. Simultaneously, it established divisions/differences between qualities and abilities that PPP managers should personally have before being engaged/involved in the management activities of the PPP project, and the skills and knowledge that the PPP organisation can provide to the PPP managers to assist them in building their capacity for more efficient and effective management performance. However, the question of whether these competencies are different (or similar as the case might be), to what is required in the traditional command-and-control management structures is left unanswered as it needs further future research. Managing in multi-sectoral, multi-relational and/or multilateral-type of organisational settings was acknowledged by this study, as well as the PPP literature as a different form of management (see for example, Keast at al., 2004; Teisman & Klijn, 2002; Lasker, Weiss & Miller, 2001; Pessoa, 2008). It requires a shift in roles, plus a way of viewing and doing things, and flexibility to effectively respond to the unexpected changes in the environment that are more common occurrences in managing PPPs than occurs in traditional unilateral-owned organisations.

5.1.5 PPP Monitoring and Controlling Mechanisms (RQ.1.e; KF 1.16)

The following discusses the key findings from RQ.1.e:

**RQ.1.e:** What are the effective performance monitoring and controlling mechanisms used to oversee the progress of PPPs in Jordan?
Table 5.9 provides a summary of the key findings for this research question, which resulted in three newly emerging themes that extend the PPP literature on controlling and monitoring mechanisms used to oversee the progress of a PPP project and improve its managerial effectiveness.

Table 5.9: Key findings for RQ1.e (PPP monitoring mechanisms)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF1.16: Complying with the project agreement, following up progress reports and applying specialised monitoring techniques were the most effective monitoring and controlling mechanisms to oversee the progress of the PPP projects</td>
<td>Newly emerging</td>
</tr>
</tbody>
</table>

Figure 5.11 demonstrates the contributions of the current research in answering research question RQ.1.e.

Figure 5.11: PPP monitoring mechanisms

There is a consensus among PPP researchers that maintaining consistent monitoring and evaluation of the performance of the PPP project is one of the key success factors or elements for more effective PPP management and implementation (i.e. Lister, 2000; Zafar Ullah et al., 2006; Knichman & Stone, 2007). Researchers also agreed that performance parameters, outcome measures and reporting systems should be established prior to the program implementation to avoid any potential problems in the future (Irvin, 1993; Schmeig & Climko, 1998; Grimsey and Lewis, 2004a). However, although important, the nature of controlling and monitoring techniques that are put in place to measure the progress and the effectiveness of the PPP project had been insufficiently addressed in the PPP literature. Specifically, previous PPP research was restricted to acknowledging the importance of monitoring the progress of a PPP project, however, a detailed view of the monitoring processes and controlling mechanisms that the PPP management puts in place to ensure the project is progressing as planned was lacking in the extant PPP literature. Further, whether partners adopt different (or similar) monitoring techniques was unclear in the previous research. To fill this gap in the PPP research, the current research identified and detailed the nature and the types of the
management and performance controls that PPP organisations can implement to effectively oversee the progress of a PPP project.

The analysis of the CCT experience in Australia in 2006 shows that partners disagreed over a long period about certain issues such as the design of the project, its total cost, anticipated patronage rates (number of vehicles using the tunnel per day) and user toll fees, without reaching agreement. Disagreement between partners on these issues could have been easily prevented or prevaricated had the project agreement precisely stated the overall project objectives, from which acceptable outcomes and performance measures are derived, supported by well-structured reporting systems and procedures before the project commenced. The absence of performance measures for the PPP project, and lack of effective controlling mechanisms to monitor the progress achieved, can potentially lead to partners’ split-purposes and their disagreement on what outcome each is expecting to achieve from their partnership.

The response obtained from the interviewees of this study emphasised how important it was to follow up the progress achieved during the course of the PPP project implementation. Nevertheless, this process took three main paths: complying with the project agreement, following up the progress reports produced in the field, and applying internally specialised monitoring techniques (Figure 5.12).

![Figure 5.12: PPP effective controls](image)

Since, the project agreement and the detailed project plans were comprehensively and precisely set out and agreed upon by partners beforehand, these were reliable mechanisms that partners regularly referred to, to ensure that they were steering to the right direction. The project agreement and its detailed plans were described by the PPP
managers as ‘thermometers’ that assisted them to oversee the progress achieved and manage all stages of the project more effectively.

In addition to the project agreement and its related plans, PPP managers followed up the progress reports prepared by the staff and engineers (e.g. the independent engineers-IEs) who were based on the project’s site. Partners (e.g. PPP managers) used these reports to ensure whether the project is progressing as planned and discuss any variations timely with the partner through regular progress meetings. Employing staff and IEs on the site to report to the PPP management of each partner about what is happening on the ground was one of the most effective practices in the management of PPPs in Jordan.

Concurrently, each partner in each organisation/case study adopted specialised internal management, financial and technical control systems to oversee the progress of the project. Examples of these controls were the periodic staff evaluation systems, internal reporting procedures, financial auditing and technical quality assurance and management control systems (see Table 5.10). However, the experience of the two case study projects has shown that the differences in the type of controls used by each partner, across the two organisations, did not result in contradictions between these different controlling systems or mechanisms. In fact, they complemented each other in practice, as they were assumed to reveal similar (if not the identical) assessment and controlling outcomes. However, whenever the outcome of these different controls produced varied results, managers met to discuss these variations and agree on remedial action (whenever needed). Nevertheless, the differences in the internal controlling mechanisms mainly emerged as a product of the internal needs and conditions for each partner. One example was the experience of the public partner of the SWWTP in developing internally custom-tailored controlling measures and performance indicators (PIs).

Further, the findings of the current research did not support the assumption that the inconsistency that existed among these systems would necessarily impact negatively on the effective management of PPP projects. That is simply because the parameters of the expected performance outcomes that were put in place were basically drawn from the detailed project objectives that were precisely spelled out in the project agreement and its detailed plans. Hence, applying different project controlling techniques to suit the
internal needs of each partner was not an obstacle to the progress of the PPP projects as far as partners agreed upon and worked towards achieving the same objectives or ends.

**Table 5.10: PPP performance controls, systems and actions adopted by PPP organisations in Jordan**

<table>
<thead>
<tr>
<th>Performance Controls, Systems and Actions</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWWTP</td>
<td>QAIA</td>
<td>SWWTP</td>
</tr>
<tr>
<td>1 The project agreement and related plans</td>
<td>Have been used as performance benchmarks</td>
<td>Have been used as performance benchmarks</td>
</tr>
<tr>
<td>2 Using internal specialised controls, performance indicators (PIs) and software programming techniques</td>
<td>Primavera programming software; In-house developed PIs beforehand</td>
<td>QUESH program / manual</td>
</tr>
<tr>
<td>3 Prepare and dispatch progress reports</td>
<td>Dispatched to the partner periodically; Employing consultants, advisors and establishing database systems</td>
<td>Reports prepared by the independent engineers (IEs) on the site</td>
</tr>
<tr>
<td>4 Review and follow up periodic reports received from the partner</td>
<td>Monthly progress and maintenance reports</td>
<td>Follow up reports received from the partner</td>
</tr>
<tr>
<td>5 Conducting meeting and site visits</td>
<td>Meeting with maintenance engineers; Conducting regular site visits and a checklist</td>
<td>Internal meetings to discuss any matters reported by staff, IEs and investors</td>
</tr>
</tbody>
</table>

In summary, the current research contributed to the PPP literature in identifying the nature of the management and performance controls that PPP organisations put in place that proved effective in overseeing the progress of the PPP project. The current research has also shown that partners have established and put in place different (but not contradictory) internal controlling mechanisms. Further, this study has reinforced the importance of establishing and/or developing performance parameters, outcome measures and reporting systems prior to the project implementation as suggested by Lister (2000), Zafar Ullah et al. (2006), Knichman and Stone (2007), Irvin (1993), Schmeig and Climko (1998) and Grimsey and Lewis (2004a). More importantly, a well-designed and comprehensively established project agreement that fully details the expected performance outcomes of the PPP project and that are agreed upon by partners before the project commences was one of the most effective practices in the management of PPP projects, no matter how different were the controlling mechanisms.
adopted internally by each partner. The project agreement, internal controls and field progress reviews together greatly assisted PPP managers to effectively manage their projects. Working mutually and persistently to achieve the expected project outcomes was one of the key factors to the successful management and implementation of the two case study PPPs in Jordan.

Finally, the discussion of the key findings (KFs 1.1-16) resulting from research question RQ.1 and subsequent sub-research questions RQ1.a, RQ1.b, RQ1.c, RQ1.d, and RQ1.e, which addressed the PPP management framework, has shown that the current research reinforced, supported and contributed to the extant PPP literature on a number of areas related to the management of the implementation phase of PPPs in Jordan.

In terms of the effective PPP management practices (RQ.1a), the present study extended the extant PPP literature in regards to: the importance of developing the local human resources to take up the PPP management responsibilities for more sustainable long-term objectives; using effective monitoring mechanisms to oversee the progress of the PPP projects was not limited to one partner; and, knowledge and prior experience in managing PPP projects was one of the important factors that improved the abilities of the PPP managers to effectively manage their PPPs. This study has also reinforced the extant PPP literature on the importance of open communication between partners, their willingness to compromise, and the project agreement as critical factors that contributed to effective PPP management.

In regards to the difficulties that faced management in the implementation phase of a PPP in Jordan (RQ1.b), this study extended the PPP literature in identifying other types of difficulties that stemmed from external sources than those mentioned in the previous research. It also provided a better understanding of the nature of the difficulties that PPP managers experience in managing their PPPs. Specifically, it has re-phrased/re-organised the cause-effect relationships between the internal and external difficulties that PPPs face during their implementation and the potential consequences of these difficulties on the effective management of these PPPs. Additionally, this study has extended the extant PPP literature on the existence and the significant impact of the internal management difficulties on the overall outcome of the PPP performance management. Further, this study has suggested that the existence and interplay between
the internal and external management difficulties, with the absence of an agreed upon plan to handle such difficulties, creates an environment of protracted unresolved problems and potentially results in poor performance management and PPP failure.

In terms of the institutional differences between partners (RQ1.c), this research has extended the PPP literature in detailing the context and content within which partners operate or interact which was not available in previous research. This study has reinforced literature on the impact of the differences in philosophical, managerial and legal frameworks between partners and their differences in views and expectations on the way each partner organisation is managed. It has also supported the argument that a successful PPP between partners with diverse backgrounds is possible to achieve providing that the competitive advantages for each are efficiently and effectively utilised and combined.

In managing the institutional differences between partners, the present study has suggested that PPP effectiveness can be determined by the extent to which the management approaches and the built-in safeguards that each partner develop and put in place are effective in eliminating the potential negative impact of the forces that the institutional differences make on the overall performance of a PPP. In this study, these safeguards and strategies that the PPP management adopted were strong enough to limit the impact of the institutional differences or the conflicts in interests and goals between partners or the relationship between them. In consequence, the assumption that partners had conflicting goals that stem from their individual sub-optimisation behaviour was not well supported in the current study.

The current research has supported the assumption that effective communication is one of the most powerful tools in the effective management of the institutional differences between partners. The current research has also supported the suggestion that partners should be prepared to compromise and give concessions whenever needed, to develop practical approaches to minimise the effect of their institutional differences and to view the partnership as a continuous learning process to enable them to effectively manage their institutional differences. Furthermore, this study has supported the argument that partners (particularly, the public sector partner) should be flexible and develop new and innovative ways of doing and viewing things, as well as, having common goals and
clear roles, as suggested by a number of PPP researchers, to effectively manage their differences. However, this research extends the extant PPP literature by suggesting that both partners are required to develop and put in place effective and practical approaches and safeguards to effectively manage the institutional differences between their organisations.

In respect to the type of management competency that is required to manage PPP-type projects (RQ.1d), the current research identified, in detail, what can be considered as a personal attribute, experience, skill and/or knowledge that is important for the effective management of a PPP organisation. It established divisions/differences between qualities and abilities that PPP managers should personally have before being engaged/involved in the management activities of the PPP project, and the skills and knowledge that the PPP organisation can provide to the PPP managers to assist them in building their capacity for more efficient and effective management performance.

Finally, the current research has contributed to the PPP literature in identifying the nature of the effective management and performance controls (RQ1.e) that PPP organisations put in place to oversee the progress of the PPP project. The study has shown that partners have established and put in place different (but complementary) internal controlling mechanisms. This study has reinforced earlier research in regard to the importance of establishing and/or developing performance parameters, outcome measures and reporting systems prior to the project implementation. A well-designed and comprehensively established project agreement that is agreed upon by partners beforehand was one of the most effective practices in the management of PPP projects. The project agreement, internal controls and field progress reviews together greatly assisted PPP managers to effectively manage their projects.

To provide an in-depth understanding of the PPP management in the implementation phase, there was a need to explore the details of content, context, nature and management of the inter-organisational relationships (IORs) between partnering organisations in Jordan. The following section provides a discussion of the key findings resulted from answering research question (RQ.2) which addressed this issue.
5.2 DISCUSSION OF KEY FINDINGS FOR THE IORS FRAMEWORK

The IORs framework involves discussion of key findings of Research Question 2 (and subsequent sub-research questions):

RQ2: What is the environment in which inter-organisational relationships (IORs) in Jordanian PPPs are managed?

The IORs environment involved the nature of the inter-organisational relations between PPP partners and the management of these relationships in Jordanian PPPs.

5.2.1 The Nature of the IORs between Partners (RQ2.a; KFs: 2.1-3)

The following discusses the key findings from RQ2.a:

*RQ2.a: What is the content, context and nature of the inter-organisational relationships (IORs) between PPP partners in Jordan?*

With respect to this research question, this study has explored the content, context and nature of the interaction between partners. As a result, three key findings were reported within the context of four main themes, namely: the interaction purpose; frequency; media and methods; constraints; and, nature. Within each of these themes, a number of sub-themes emerged from the data. These themes and sub-themes were found to be closely linked to the details and nature of the IORs between partners of the Jordanian PPP projects.

The Content and Context of IORs (KF 2.1-2)

Table 5.11 provides a summary of the key findings for the first part of the research question (RQ2.a; KFs 2.1-2) as referred to by the interviewees. Key findings for this part of the research question resulted in four newly emerging themes that extend the PPP literature on the content and context of the IORs between partnering organisations in Jordan.
The content (the purpose, frequency and methods) and context (the constraints) of the IORs between partners newly emerged in this research. These issues have been addressed by previous research on IORs in the context of the classifications given by researchers to the IOR development processes, in their attempts to detail what might be happening in each stage of the partnership development. However, the extant research included implicit and indirect reference to the content and context of the interaction between partners in each stage of their relationship lifecycle (see Table 5.13). In particular, previous research on IORs has generally addressed the pattern of the relationship development between partners (from a macro-level perspective) with little emphasis on the details (content and context) of the relationships between partners at the program level or from a micro-level perspective (see, for example, Weihi, 2008). Additionally, very little research has subordinated the content and context of partners’ relationships to empirical verification by, for example, taking a real life partnership as a case study and verify the assumptions developed in the field of IORs against the stage of the relationship development in a particular partnership setting. Taking the purpose of interaction in the context of IORs as an example, Mandell, Keast & Brown, 2009) argued that cooperation and coordination between partners aimed to achieve a specific

<table>
<thead>
<tr>
<th>IOR Theme</th>
<th>Key Findings</th>
<th>Relation to Literature</th>
<th>References from the interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOR Content</td>
<td>To coordinate, plan and take decisions mutually (KF2.1)</td>
<td>Newly emerging</td>
<td>“We also meet whenever there is a need to coordinate activities and decide and plan for the next course of action” (S1.2/Pc).</td>
</tr>
<tr>
<td>Frequency</td>
<td>Interaction occurred frequently and whenever a need arose (KF2.1)</td>
<td>Newly emerging</td>
<td>“We are in touch .. on almost daily basis (S1.1/Pc). A part from our .. meetings, we can call, email or arrange to visit them anytime whenever required..” (S2.9/Pt).</td>
</tr>
<tr>
<td>Methods</td>
<td>Communication occurred electronically, directly and indirectly (KF2.1)</td>
<td>Newly emerging</td>
<td>“… The phone is the most convenient method to start with.. We also conduct weekly or bi-weekly meetings ..Our staff and IEs with theirs .. in regular contact with each other..” (S2.3/Pc).</td>
</tr>
<tr>
<td>Constraints</td>
<td>The IORs were constrained by stressful working environment, scarcity of financial, time and other resources and coordination difficulties (KF2.2)</td>
<td>Newly emerging</td>
<td>“We have time and resources constraints.., and the workload in the first 12-18 months was generally excessive. Besides, .. coordination .. is extremely an exhaustive job” (S1.8/Pt). “… modifications to .. the project design was faced with our financial constraints .. Also, requesting additional resources .. is faced with the government’s long, never-ending procedures .. to inject extra funds into the project is always faced with difficulties” (S1.2/Pc).</td>
</tr>
</tbody>
</table>
goal, while collaboration aimed to achieve synergy and find innovative solutions to problems. That is why Weihe (2008) suggested the need for further research into certain ‘black-boxed’ areas such as: How does interaction between partners take place in practice? What is the pattern and frequency of interaction? What is the content of this interaction? To this end, and in response to Weihe’s (2008) call to explore the content and context of the interaction between partners, this study has provided a more detailed account of these issues in regards to the relationships between partners during the implementation phase of the partnership.

In this study, most of the interaction between the Jordanian partners aimed at coordination, planning and taking decisions jointly. They had frequent direct and indirect interaction with each other and whenever the need arose. Nevertheless, the stressful working environment, scarcity of financial, time and other resources and coordination difficulties were constraints that they experienced during the course of their interaction. Despite these constraints, partners believed that continuous communication, coordination and joint decision-making with their counterparts improved their relationships and promoted conditions for a more positive relationship. The result of these practices, they argued, assisted them to have successful and trusting relationships. These findings have extended the literature on IORs in PPP settings in respect to the importance of considering the significant impact, process and details of the content (the purpose, frequency and methods) and context (the constraints) of the interaction between partners on the outcome of their inter-organisational relationships.

**The Nature of IORs (KF 2.3)**

The key finding for the second part of research question RQ2.a, that is related to the nature of the IOR between partners in Jordan, resulted in one emerging theme that extended and reinforced the PPP literature on the content and context of the IORs between partnering organisations in Jordan. A summary of the key findings (KF2.3) for the second part of RQ2.a is provided in Table 5.12.
Table 5.12: Key findings for RQ2.a (IORs between PPP partners; KF 2.3)

<table>
<thead>
<tr>
<th>IOR Theme</th>
<th>Key Findings</th>
<th>Relation to Literature</th>
<th>References from the interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>The IORs between partners were complementary relationship based on equality, trust and commitment by having mutual / compatible goals. The project agreement was viewed as a regulator of the partners’ formal IORs (KF2.3)</td>
<td>Newly emerging / Reinforced</td>
<td>“Everyone involved in this partnership has something to give out in order to get .. what is given .. is needed to the partnership. This need could be anything such as certain expertise, financial resources, materials or any other resource” (S1.3/Pc). “In PPPs, you and the other partner are neck in neck, peers and equals. We have one objective .. Doesn’t matter what .. benefits each partner gets. That is .. what everybody is there for. That is to win. And, that’s why it is called ‘partnership’. It is partnership by default” (S1.5/Pc). “Officially, the relationships between us are well-defined in the project agreement .. In fact, the agreement is the main framework we all refer to ..” (S2.9/Pt). “In PPPs.. matters of concern have to be dealt with and settled down by the agreement of both partners. No one party should behave and act in a way that puts the interests of the other party at stake..” (S2.6/Pt). “Whether to trust the other partner or not is not an option here. It is a must ..” (S1.4/Pc).</td>
</tr>
</tbody>
</table>

Previous research on PPPs and dyadic-type networks that addressed IORs between partners has mainly focused on the process of their relationship development. The intention was to explore the nature of the IORs in each phase of the relationship development and to assist partners to improve their understanding of the kinds of relationships which they undertake in each stage (or will experience during the course of their relationships). To that end, researchers attempted to picture inter-organisational relationships between partnering organisations by typifying these relationships (see Table 5.13). However, these typologies differ considerably from one to another, representing inconsistency in the researchers’ views and their expression of the type, nature and development of the IORs between PPP partners.
Table 5.13: The content, context and nature of the IORs between partners identified in the literature and the current study

<table>
<thead>
<tr>
<th>IOR Issue</th>
<th>The IORs literature</th>
<th>PPP Researchers</th>
<th>The Current Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The interaction purpose</td>
<td>Implicitly reported</td>
<td>Mandell, Keast &amp; Brown (2009); Pan, Sparks &amp; Fulop (2007)</td>
<td>Communication between partners mainly aimed to discuss progress, coordinate activities and take decisions</td>
</tr>
<tr>
<td>The interaction frequency and media/methods</td>
<td>Not reported</td>
<td>-</td>
<td>The interaction took place on daily, weekly, monthly and ad hoc basis mostly through mail, phone calls and face-to-face communication</td>
</tr>
<tr>
<td>The interaction constraints</td>
<td>Not reported</td>
<td>-</td>
<td>Heavy workload, time and financial resources and coordination difficulties between partners were the most common constraints that impacted on the frequency of interaction between partners</td>
</tr>
<tr>
<td>The relationship nature in the partnership development Process</td>
<td>Relationships start with competition, progress through cooperation to coordination and then on to collaboration and ending in control</td>
<td>Green &amp; Matthias (1997)</td>
<td>The IOR between partners was complementary relationship based on equality, trust and commitment by having mutual/compatible goals. The project agreement was viewed as a regulator of the partners’ formal IORs.</td>
</tr>
<tr>
<td>Two dimensions of partners’ interaction: partners characteristics, and IOR characteristics</td>
<td>Bult-Spiering (2003)</td>
<td></td>
<td>The nature of the IORs has tended to be strong-type relationships.</td>
</tr>
<tr>
<td>A typology of cooperation based on the degree of formality and benefits to partners</td>
<td>Schaeffer &amp; Loveridge (2002)</td>
<td></td>
<td>An integrated model of the nature and process of IORs is suggested based on previous IOR literature and this research.</td>
</tr>
<tr>
<td>IOR types (the ‘3Cs’): Cooperation (short term, informal, less strategic; each partner is autonomous); Coordination (information sharing, strategic joint planning and decision-making); Collaboration (a stable, long-term integration with strong commitment and trustful relationships)</td>
<td>Brown &amp; Keast (2003)</td>
<td></td>
<td>A positive relationship environment is introduced based on the findings of the current research.</td>
</tr>
<tr>
<td>The process of B2B relationships starts with a measuring-up to testing and ends with phase commitment</td>
<td>Pan, Sparks &amp; Fulop (2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four network management strategies and tasks: activating, framing, mobilising, and, synthesising</td>
<td>Keast &amp; Hampson (2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation and coordination entails independent relationships to achieve a specific goal. Collaboration goes beyond interdependence to full commitment to achieve synergy and find innovative solutions to problems</td>
<td>Mandell, Keast &amp; Brown (2009)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notwithstanding the differences between relationship development typologies suggested by a number of IOR researchers, this study found that there has been a general pattern that existed among these typologies that could link them (Figure 5.13). As such, it is suggested here that IOR development stages can be located on a continuum of a 5-point scale that ranges from a strong, well-established relationship at one end to a more fragmented, inconsistent relationship at the other end. For example, the nature of the IORs in the ‘exchange relationship’ (the buyer-seller; formal; limited partnership) suggested by Schaeffer and Loveridge (2002), the ‘activating’ stage in Keast and Hampson’s (2007) typology, the ‘competition’ stage in Green & Matthias’ (1997) typology, the ‘cooperation’ stage in Brown & Keast’s (2003) typology, the ‘short-term independent relationships’ in Mandell, Keast & Brown’s (2009) typology, the ‘measuring up’ stage in Pan, Sparks & Fulop’s (2007) typology are characterised by being fragmented and immature inter-organisational relationships. Likewise, at the other end of the scale, relationships are characterised by being stronger, more intense and effective relationships.

Figure 5.13: IOR typologies in the literature and the current research

In the figure above, the nature of the IORs in this study can mainly be located veering to the right-hand side of the scale that represents a tendency for strong relationships. More specifically, the findings of the current research supported the assumption that the nature of the relationships between partnering organisations in Jordan was strong.
enough to keep the progress of the PPP projects steady and on track. The positive relationship environment (PRE) framework, suggested by this research, which was based on equality, trust and commitment, assisted the Jordanian partners to have more productive and effective inter-organisational relationships. Having, and working towards, mutual goals and the well-established project agreement also assisted partners in creating a more positive ‘win-win’ relationship environment. The characteristics of a positive relationship environment that PPP partners in Jordan experienced was frequently and consistently referred to by the interviewees and is displayed in Table 5.14.

Table 5.14: Characteristics of the positive relationship environment (PRE) framework in the Jordanian PPPs

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>References from the interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mutuality (in objectives and DM)</td>
<td>“In the PPP projects, you and the other partner are neck in neck, peers and equals. We have one objective: to see this partnership a successful one” (S1.5/Pc). “No one party should behave and act in a way that puts the interests of the other party at stake” (S2.6/Pt).</td>
</tr>
<tr>
<td>2 Equality</td>
<td>“In PPPs, you don’t deal with your partner in a way that you dominate him or exert your power and will on him” (S2.6/Pt).</td>
</tr>
<tr>
<td>3 Using a mixture of formal/informal relationships</td>
<td>“We exchanged our private mobile numbers the first time we met” (S1.1/Pc). A part from our periodic scheduled meetings, we can call, email or arrange to visit them anytime whenever required. We are happy with this arrangement as well as they are too” (S2.9/Pt). “I started building up a network of social relations. People are more willing to cooperate if they get to know you by being close to them; just like a friend” (S2.1/Pc).</td>
</tr>
<tr>
<td>4 Adopting a win-win approach</td>
<td>“That is basically what everybody is there for. That is to win” (S1.5/Pc).</td>
</tr>
<tr>
<td>5 Using regulators (the project agreement, independent engineers, advisors and consultants)</td>
<td>“Officially, the relationships between us are well-defined in the project agreement. It is the main framework we all refer to in the case of any misunderstanding” (S2.9/Pt). “If the agreement was not helpful, we seek third-party’s second opinion such as the legal consultants for legal matters and the IEs for technical matters” (S1.4/Pc).</td>
</tr>
<tr>
<td>6 Trusting relationships</td>
<td>“.. trust is not an option here. It is a must” (S1.4/Pc).</td>
</tr>
<tr>
<td>7 Having good intentions</td>
<td>“Frankly speaking, our private partner has good and sincere intentions” (S1.4/Pc).</td>
</tr>
<tr>
<td>8 Commitment to positive outcomes</td>
<td>“you and the other partner are neck in neck. We have one objective: to see this partnership a successful one” (S1.5/Pc). “.. we are not fighting each other. We stand side by side to fight for more improved quality and performance levels” (S1.2/Pc).</td>
</tr>
<tr>
<td>9 Continuous interaction</td>
<td>“We are in touch with our partners on almost daily basis” (S1.1/Pc). “These meetings [periodic progressive meetings] are the best way to keep everybody hooked to the project” (S1.2/Pc).</td>
</tr>
<tr>
<td>10 Flexibility and readiness to compromise</td>
<td>“.. it is essential that managers have the ability to adapt to shifts in public policy and government representation” (S1.10/Pt). “Following the ‘give-get’ approach was successful in dealing with [our] differences. To face such instances, it makes sense to compromise. Compromising was a practical and effective strategy in situations where we reached no impasse or it was not possible to change something” (S2.2/Pc).</td>
</tr>
</tbody>
</table>

The advantages of the classification model suggested by this research are several. First, it is a simplified model that can improve our understanding of the relationship type, development and process that partners may experience during the course of their PPP
Managing PPP infrastructure projects in Jordan

project implementation. Second, because of its elasticity, it could integrate and compile many of the suggested relationship development typologies, and could potentially accommodate many other typologies under this unified typology. Third, due to its consistency and practicality, it can be used as a conceptual framework for the development and nature of IORs. Fourth, it clearly shows that the differences between typologies identified in previous research have mainly resulted from differences in the way researchers expressed and perceived the nature of the IORs, while indeed they were referring to the same phenomenon.

Finally, the findings of the second part of research question RQ2.a, that addressed the nature of the IOR between partners in Jordan, have contributed to the extant literature on IORs in the PPP context by suggesting the need for an integrated model to understand the nature and process of IORs is based on previous IOR literature as well as this research. Further, based on the findings of the current research, this study contributed to the literature by introducing a framework for a positive relationship environment (PRE) that describes and characterises the nature of inter-organisational relations within a PPP context.

In summary, the answer to the research question RQ2.a that addressed the content, context and nature of IORs in the context of PPPs in Jordan has provided a more detailed picture of the purpose, frequency and methods (e.g. relationship content) and the constraints (e.g. relationship context) of the interaction between PPP partners; which was not available in the PPP previous research. Further, it was concluded that the differences between relationship development/nature typologies suggested by a number of IOR researchers have mainly resulted from differences in the way they perceived or addressed the nature of the IORs, while indeed they were referring to the same phenomenon. Therefore, based on the previous research and the findings of the current research, a continuum of a 5-point scale/model that ranges from a strong, well-established relationship to a more fragmented relationship was introduced. This model aimed to integrate and unify different relationship typologies suggested by a number of IOR researchers to provide better understanding to the nature and process of IORs. A positive relationship environment (PRE) framework that describes and characterises the nature of inter-organisational relations within a PPP context was also introduced for the same reason. Finally, this study has suggested that the details and interplay of the
content, context and nature of the IORs have a significant impact on the outcome of partners’ relationships. In the Jordanian context, the result of this interplay has been creating a more positive and effective relationship environment.

### 5.2.2 Inter-organisational Relationship Management (RQ.2.b; KF: 2.4)

The following discusses the key findings from RQ.2.b:

**RQ.2.b: How well managed are the inter-organisational relationships (IORs) between PPP partners in Jordan?**

This study has explored the approaches that PPP managers adopted to manage the IORs between partners and reported one key finding and five themes which emerged from the data that addressed this research issue. These themes were found to be closely linked to the effective management of the inter-organisational relationships between partners of the Jordanian PPP projects.

**The IOR Management (KF 2.4)**

Table 5.15 provides a summary of the key findings for research question (RQ2.b; KF 2.4) as referred to by the study interviewees. Key findings for this research question resulted in two newly emerging themes that extend the PPP literature on the management of the IORs between partnering organisations in Jordan.

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(KF2.4): Working closely and continually with the partner, having positive attitude, following the established channels of communicating, engaging third-party and learning by experience were the most effective approaches that PPP managers adopted to manage their IORs</em></td>
<td><em>See Figure 5.16</em></td>
</tr>
</tbody>
</table>

Many researchers agreed that, in practice, inter-organisational relationships in a networked (or a PPP) setting is difficult to manage for many reasons discussed previously (see for this, Keast & Hampson, 2007; Babiak, 2009; Pearce, 2001; Ring & Van de Ven, 1992; Mandell & Keast, 2008). It is also acknowledged that the outcomes
of partnership relationships have rarely been empirically examined (Babiak, 2009); therefore, research in managing IORs, especially in PPP settings, is scarce (Bach and Whitehill, 2008). In addition, many researchers who addressed the issue of managing IORs tended to elaborate on the aspects, elements, conditions and characteristics of successful PPP arrangements. In the interim, many researchers have understood the successful management of IORs to mainly mean a successful partnership. For these researchers, IORs success is synonymous with a partnership success. The assumption could be that the effective management of the IORs between partners should necessarily result in (or at least participate in) the PPP being successful. Indeed, it is very difficult to establish a clear-cut line, or cause-effect relationship, between the effective management of IORs and the partnership as a whole in being successful. For example, Smith and Roberts (2003) argued that successful partnership relationships entailed that partners should establish clear and attainable goals, assess the benefits, obstacles and risks of the partnership, develop a partnership strategy, establish trust, and, be flexible to the changing situations. Certainly, some of these requirements (and maybe not all) are directly related to the successful management of IORs between partners.

In light of the above discussion, and in response to Fischbacher and Beaumont’s (2003), Bach and Whitehill’s (2008) and Keast and Hampson’s (2007) suggestion that further understanding about creating, implementing and maintaining effective inter-organisational relationships is needed, this study has investigated this important issue. It has specifically identified the management approaches that partners adopted to maintain and manage their inter-organisational relationships, an issue that was under-researched or inadequately addressed in previous research (see Table 5.16).

Schaeffer and Loveridge’s (2002) study has mainly addressed the issue of cooperation between partners, and particularly in relation to what makes cooperation a successful experience/practice. However, it offered valuable insights into the management of the IORs between partners. In particular, the factors that influence the interactive/cooperative effort between partners, have included the compatibility of partners’ goals (also, Smith & Roberts, 2003), coordination between them in decision making, and commitment of resources. These factors can be considered prerequisite requirements to establish more effective inter-organisational relationships. In the current research, the interviewees reported in many other contexts that they had
mutual/compatible goals they sought to achieve, but whether these factors were critical in managing their relationships has remained unexplored.

Table 5.16: Approaches in the management of IORs identified in the literature and current study

<table>
<thead>
<tr>
<th>Approaches in the Management of IORs</th>
<th>The PPP literature</th>
<th>The Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approach</strong></td>
<td><strong>PPP Researchers</strong></td>
<td><strong>Approach</strong></td>
</tr>
<tr>
<td>1 Establishing clear, attainable,</td>
<td>Schaeffer &amp; Loveridge (2002); Smith &amp; Roberts (2003)</td>
<td>Not reported</td>
</tr>
<tr>
<td>realistic and compatible goals and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Adopting a mix of arrangements</td>
<td>Keast &amp; Hampson</td>
<td>Partner managers established a set of</td>
</tr>
<tr>
<td>to create the necessary context for</td>
<td>(2007)</td>
<td>strategies to manage their</td>
</tr>
<tr>
<td>relationships to be leveraged into</td>
<td></td>
<td>relationships. However, the details</td>
</tr>
<tr>
<td>productive outcomes</td>
<td></td>
<td>and nature of these strategies were</td>
</tr>
<tr>
<td>3 Acting beyond authority limits</td>
<td>Keast &amp; Hampson</td>
<td>Following the established channels of</td>
</tr>
<tr>
<td>and contractual relationships</td>
<td>(2007)</td>
<td>communication</td>
</tr>
<tr>
<td>4 spotting and addressing problems</td>
<td>Smith &amp; Roberts</td>
<td>Having a positive attitude;</td>
</tr>
<tr>
<td>and assessing benefits and risks</td>
<td>(2003)</td>
<td>Keenness to maintain effective IORs</td>
</tr>
<tr>
<td>5 Being flexible to the changing</td>
<td>Smith &amp; Roberts</td>
<td>Not reported</td>
</tr>
<tr>
<td>situations</td>
<td>(2003)</td>
<td></td>
</tr>
<tr>
<td>6 Coordinated decision making</td>
<td>Schaeffer &amp; Loveridge (2002)</td>
<td>Working closely and continually with the partner</td>
</tr>
<tr>
<td>processes</td>
<td></td>
<td>Engaging third party</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning by experience</td>
</tr>
</tbody>
</table>

The current research supports the findings of Keast and Hampson’s (2007) study that partners established a mix of arrangements to create the necessary context for IORs to have productive outcomes. For these researchers, these relational management arrangements (e.g. strategies) were critical to achieving the goals of the PPP. In the present research, partner managers have also established a set of approaches to maintain their relationships. However, the details and nature of these strategies have been quite different. For example, Keast and Hampson (2007) found that it was necessary for the partners to go beyond the established limited authorities and contractual relational processes to enhance their interpersonal relationships. In the current research, however, partners followed and utilised the established communication channels, which have mainly been specified in their contractual partnership agreement to address and manage their relationship difficulties that emerged during the course of their partnership. Similar to Smith and Roberts’ (2003) finding that partners should establish mutual trust to facilitate the proper management of their IORs, this study revealed that partners were
ready and keen to maintain effective relationships between them. However, other strategies mentioned in Smith and Roberts’ (2003) study that partners should identify and address relationship problems and be flexible to the changing situations were reported in the current study in the PPP management context. It was not evident in this study if these approaches were critical in managing IORs between partners.

In the same vein, Schaeffer and Loveridge’s (2002) finding that coordination between partners in decision making promotes a more supportive environment for more effective relationship management, the current research supports this finding. It was found that working closely with the partner was crucial in the management of IORs. Additionally, other strategies were found in this study to be effective in handling relationship difficulties between partners during the course of their partnership relationships. When faced with relationship difficulties, partners sought third party arbitration. They also utilised their past relationship experience with the other partner to handle newly emerged relationship difficulties.

In summary, IOR in a networked (or a PPP) setting is difficult to manage in practice. In theory, the outcomes of the IORs and the management approaches adopted by partners to maintain their relationships have been insufficiently examined and inappropriately addressed in the extant IOR and PPP literatures. This study has investigated this important issue and identified the management approaches that partners adopted to maintain and manage their inter-organisational relationships.

The current research supported Keast and Hampson’s (2007) finding that partners should establish a mix of arrangements (e.g. approaches) to create the necessary environment for more productive IOR management outcomes. The details of these arrangements that the current research identified, however, were quite inconsistent with those identified by these researchers. Contrary to the findings of these researchers that partners went beyond their contractual relationships and authority lines to improve their relationships, partners in the current research utilised their contractual partnership agreement and the established channels of communication to address and manage their relationship difficulties. Further research is needed in this area to explore this inconsistency and identify which of these (or any other arrangements) reported by
Smith and Roberts (2003) and Schaeffer and Loveridge (2002) are case-specific to the IOR management.

Overall, the current research extended the extant literature on reporting two other approaches adopted by partners to maintain more productive IORs. These were: third party arbitration and learning by past relationship experience with the other partner. Nevertheless, this study suggests that further research is needed to examine the links and the impact of the effective management of IORs on the effective management of the partnership itself. Additionally, further research is needed to explore the impact of prerequisite requirements or factors suggested by Schaeffer and Loveridge’s (2002) on the management of IORs.

In conclusion, the discussion of the key findings (KFs 2.1-4) resulting from research question RQ.2 and subsequent sub-research questions RQ2.a and RQ2.b, which addressed the nature of the IOR environment in Jordan, has shown that the current research reinforced, supported and contributed to the extant PPP literature in a number of areas. The answer to the research question RQ2.a has provided a more detailed picture of the content, context and nature of the interaction between PPP partners in Jordan, which was not available in the PPP previous research. This study has contributed to the extant IOR literature by introducing a continuum on a 5-point scale that typifies partners’ IORs. Another contribution has been introducing a framework for positive relationship environment (PRE) that elucidates and characterises the nature of the IORs within a PPP context in Jordan. Further, this study suggested that the details and interplay of the content, context and nature of the IORs have a significant impact on the outcome of partners’ relationships. In Jordan, the result of this interplay has been creating a more positive and effective relationship environment.

The discussion of research question RQ2.b has pointed to two other effective approaches that partners adopted to maintain their IORs. Namely, seeking third party arbitration and learning by relationship experience. The current research also supported Keast and Hampson’s (2007) finding that partners should establish a mix of custom-tailored approaches to create the necessary environment for more productive IOR management outcomes.
To provide an in-depth understanding of the PPP management during the implementation phase, there was a need to explore the degree of compatibility, management approaches and characteristic features of the inter-organisational culture (IOC) in the researched PPPs in Jordan. The following section provides a discussion of the key findings resulted from research question RQ.3 which addressed this issue.

5.3 DISCUSSION OF KEY FINDINGS FOR THE IOC FRAMEWORK

The IOC framework involves discussion of key findings of Research Question RQ.3 (and subsequent sub-research questions):

RQ.3: What is the context in which inter-organisational culture (IOC) in Jordanian PPPs is managed?

The IOC context involved the inter-organisation cultural compatibility, management and characteristics.

5.3.1 IOC Compatibility (RQ.3.a; KFs: 3.1-3)

The following discusses the key findings from RQ.3.a:

**RQ3.a: How compatible is the inter-organisational culture (IOC) in the Jordanian PPP setting?**

This aspect of the study explored the degree of compatibility of inter-organisational culture between partnering organisations in the Jordanian context. Two key findings were reported in response to this research question, which were organised under two main themes: the inter-organisation cultural differences (e.g. the incompatible aspects), and their impact on the management of PPPs in Jordan. Within each of these themes, a number of sub-themes emerged from the data. These themes and sub-themes were found to be closely linked to the effective management of inter-organisational culture in the researched PPP organisations. Table 5.17 provides a summary of the key findings for research question (RQ3.a; KFs 3.1-2). Key findings for this research question resulted in one theme that reinforced the extant PPP literature on the existence of the
IOC differences and one newly emerging theme that extend the PPP literature on the impact of the IOC differences on the management of PPPs in Jordan.

Table 5.17: Key findings for RQ3.a (IOC compatibility; KFs 3.1-2)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KF3.1:</strong> The PPP managers acknowledged the existence of inter-organisation cultural differences between their partnering organisations in the way of doing things, communication, degree of flexibility, and adaptability</td>
<td>Reinforced</td>
</tr>
<tr>
<td><strong>KF3.2:</strong> The IOC differences had little impact on the performance of the PPPs, due to the awareness and experience of the cultural differences, mutuality of objectives and the PPP positive working environment. These together outweighed the IOC differences</td>
<td>Newly emerging</td>
</tr>
</tbody>
</table>

The IOC Differences and their Impact (KF 3.1-2)

One of the aims of this research was to explore the degree of the compatibility between the organisational cultures of the two main partners (e.g. the IOC) and its impact on the management of PPPs. In the extant PPP literature, it is assumed that compatibility of cultures for two organisations involved in the partnership arrangement was one of the critical factors that contributed to partnership effectiveness (see also, Knickman & Stone, 2007; Bach & Whitehill, 2008). Specifically, partners must have a mutual understanding and view of the meaning of the partnership and its requirements (see also, Malmborg, 2003). On the other hand, inter-organisational cultural differences in partnership settings can lead to meagre consequences on the overall partnership performance and outcomes (see also, Coopers & Lybrand, 1996). Examples of these consequences are displayed in Table 5.18. See also Huxham and Vangen (2000); Knickman and Stone (2007).

Many researchers in the field of PPPs and cross-cultural studies agreed on the existence of cultural differences between public and private sector organisations in a partnership setting (e.g. Bach & Whitehill, 2008; Baumann, 2008; Huxham & Vangen, 2000; Jacobs, 1992; Johnston & Guedergan, 2007; Klijn & Teisman, 2003; Knickman & Stone, 2007; Malmborg, 2003; Mann, Pier & Yasin, 2007; Sabjanyi, 2006; Teisman & Klijn, 2002; Vining & Boardam, 2008; Weihe, 2008). Many others have also raised deep concerns about the potential negative impact of these differences on the partnership process (i.e. Huxham & Vangen, 2000; Tierney et al., 2010; Noble & Jones, 2006; Malmborg, 2003; Schaeffer & Loveridge, 2002; Klijn & Teisman, 2003). Yet, very little
Empirical research has been conducted to explore these differences in respect of their impact on the PPP management. Table 5.18 provides a detailed summary of the nature of the IOC differences and their impact as concluded from previous research on PPPs and other related fields, as well as the current research. As shown in the table, the IOC differences that were acknowledged by earlier research can be classified in three forms: institutional cultural differences, communicational and differences power relationship differences.

Table 5.18: The IOC differences identified in the literature and current study

<table>
<thead>
<tr>
<th>The IOC Differences</th>
<th>The PPP/IOC Literature</th>
<th>The Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cultural differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Institutional cultural differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different norm and value systems (commercial vs public service)</td>
<td>Huxham &amp; Vangen (2000); Jacobs (1992)</td>
<td>- Adopting different strategies, agendas and processes - Difficulty with joint-decision making - Exhibiting different values, concerns, accountabilities, objectives - Different views of partnership challenges Supported in respect to: - The way activities were prioritised and the details of the work to be done - The differences in management approaches, perspectives, orientation and focus</td>
</tr>
<tr>
<td>Different ethical systems and moral syndromes (guardian vs commercial)</td>
<td>Kljin &amp; Teisman (2003)</td>
<td></td>
</tr>
<tr>
<td>Different cultural characteristics and operating logics (profit vs non-profit)</td>
<td>Bach &amp; Whitehil (2008); Johnston &amp; Gudergan (2007)</td>
<td></td>
</tr>
<tr>
<td><strong>Communicational differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language differences b/w commercial vs public service organisations</td>
<td>Huxham &amp; Vangen (2000)</td>
<td>- Miscommunication and misunderstanding - Partners do not have common view of their problems - The private partner fear of disclosing confidential information to competitors Supported in respect of: - The way each partner viewed certain issues - Communication differences especially at the beginning of the project - Language and understanding difficulties</td>
</tr>
<tr>
<td>Stereotypical differences (the other party is not trustworthy)</td>
<td>Malmborg (2003)</td>
<td></td>
</tr>
<tr>
<td><strong>Power relationship differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uneven or unequal power relationships (which party should take the lead)</td>
<td>Huxham &amp; Vangen (2000); Schaeffer &amp; Loveridge (2002)</td>
<td>- Feelings of disempowerment - Feeling of loss of authority - Cultural clashes, employees resist new ideas - Differences in role conceptions Not supported</td>
</tr>
<tr>
<td>Role expectations differences</td>
<td>Tierney et al. (2010)</td>
<td></td>
</tr>
<tr>
<td>Cultural distance and clashes (deep and abiding cultural divide)</td>
<td>Noble &amp; Jones (2006); Schriener (1991)</td>
<td></td>
</tr>
<tr>
<td>Partner disparity</td>
<td>Mann, Pier &amp; Yasin (2007)</td>
<td></td>
</tr>
</tbody>
</table>
The institutional cultural-type differences are those that are related to differences in norms, value and ethical systems and moral syndromes that stem from the inherited cultural differences between the commercial, profit-type organisations (that represent private sector partner) and non-profit, guardian-type organisations (that represent public sector organisations) in the partnership (see, Huxham & Vangen, 2000; Jacobs, 1992; Klijn & Teisman, 2003; Bach & Whitehil, 2008; and, Johnston & Gudergan, 2007). Researchers believed that these differences have substantial consequences on the partnership process. They assumed that as a result of these differences, partners adopt different strategies, agendas and processes, have difficulty in making joint decisions, exhibit different concerns, accountabilities, objectives and have different views of the challenges they face during the partnership process. The findings of the current research acknowledge the existence of these types of cultural differences, particularly, in the way partners prioritised and accomplished their activities, as well as the differences in their management approaches, focus and orientation. For example, partners in the QAIA disagreed on the way the construction works on the site should be prioritised and accomplished. However, these differences arose even between organisations within the same sector (private or public). One interviewee pointed to the differences between people from different cultural/national backgrounds (i.e. Americans, British and French) in how they think and do things, and added that “... the mentality and orientation of each partner is a bit different” (S2.10/Pt). Another interviewee explained further these differences by saying: “there are also fundamentally different views or approaches to business within each of these six companies [Middle Eastern and European investment companies] as they are a mix of purely private, to sovereign wealth to recently divested/privatised state-owned enterprise” (S1.8/Pt).

The communication differences that are related to language, stereotypical differences and confidentiality issues (see, Huxham & Vangen, 2000; Malmborg, 2003; Schaeffer & Loveridge, 2002) are examples of the second type of the cultural differences between partners. According to the researchers in the field of study, the result of these differences is that partners may have different views about their problems, and therefore, may experience communication and understanding difficulties. As argued by Schaeffer and Loveridge (2002), the result of these stereotypical differences, the private sector partner for example, due to fear of disclosing confidential information to competitors, may not be fully devoted to the partnership. In the current study, partners
experienced some of these difficulties that stemmed from this type of cultural differences, especially at the beginning of the project. For example, one interviewee said that “we, as public partners, cannot discuss any issue far from thinking about its social and sometimes, political consequences as compared to our private partners who are mainly commercially-driven” (S1.3/Pc). Another example was the medium of communication between partners and the inability of some partners (mainly the public sector partners) to cope up with the highly advanced level of language and terminology used to discuss certain issues. Another interviewee mentioned other examples of communication differences. He commented: “although English is the agreed upon communication medium .., we had occasions .. where the contractor spoke in French when it came to an issue of critical or sensitive nature” (S2.1/Pc).

The differences in power relationships represented the third type of IOC differences between partners. Researchers such as Huxham and Vangen (2000), Schaeffer and Loveridge (2002), Tierney et al. (2010), Noble & Jones (2006) and Schriener (1991) assumed that partners represent public and private sector organisations experience power relationship inequality. For these researchers, difficulties arise between partners due to their uneven or unequal relationships (e.g. which party should take the lead). According to these researchers, the result of this cultural difference, partners are faced with role expectations differences and may experience deep and abiding cultural divides, gaps and clashes. The relationship inequality between partners may also result in other possible consequences such as their feelings of disempowerment, loss of authority and employees resistance. The current research, however, did not report any of the power relationship differences between partners, and therefore, did not find much support for the existence of these relationship difficulties that these researchers assumed to exist. On the contrary, the interviewees viewed their relationship as being equal (see the nature of the IORs in Chapter 4). Specifically, the interviewees described the relationship between partners as an equal relationship where no one partner intended to dominate, diminish, de-estimate or devalue the other partner.

Overall, the impact of the cultural differences that this study identified was found to be limited in the current research. The PPP managers in this study viewed these differences positively as they had to deal with them as a given. Besides, they were fully aware of, and previously experienced, such differences in other projects. In addition, mutuality of
goals that the partners in the current research believed they had and the positive working environment that they experienced had limited the negative consequences of such IOC differences.

The assumption that obstacles in partnership arrangements resulted from cultural aspects than from technological ones (e.g. Baumann, 2008; Manchester, 1997) might be true. However, partners in the current research were able to limit and/or neutralise the negative impact of the cultural differences. Further, many of the IOC differences mentioned in the extant PPP and other related literatures have been previously addressed in the current research in the context of managing the institutional differences between partners. This can be explained by the fact that the interviewees referred to these differences to be more objective, culturally-neutral values away from being subjective cultural differences. That is not to say that cultural differences are less influential or less important. Indeed they are. This study acknowledged the existence of these differences, but underestimated their negative influence in the support of positive working environment that the PPP managers in Jordan have experienced.

In conclusion, the discussion of the key findings (KFs 3.1-2) resulting from research question RQ.3.a, which explored the IOC differences (e.g. the incompatible aspects) and their impact on the management of PPPs in Jordan, has shown that the current study reinforced and supported the extant PPP literature by acknowledging the existence of two forms of IOC differences between partners. These were: the institutional cultural-type differences and communicational-type differences. However, this research did not find enough support for the third type of the IOC differences (the power relationship differences). This study has also extended the extant PPP literature on the impact of IOC differences for PPP management. Given the mangers’ awareness and experience of the IOC differences, mutuality of goals and the positive working environment, they could limit the negative consequences of their IOC differences. The positive working/relationship environment outweighed the cultural and institutional differences and challenges that faced PPP management in Jordan (see Figure 5.14).
Figure 5.14: The positive working/relationship environment outweighed the IOC differences

5.3.2 IOC Management (RQ.3.b; KF 3.3)

The following discusses the key findings from RQ.3.b:

**RQ2.b: How well managed is the inter-organisational culture (IOC) between PPP partners in Jordan?**

This study has explored the management approaches used by the PPP partners to manage their IOC differences. One key finding was reported in response to this research question. Under this main theme (managing the IOC differences), a number of sub-themes emerged from the data. These themes were found to be closely linked to the effective management of inter-organisation culture in the researched PPP organisations in Jordan. Table 5.19 provides a summary of the key findings for research question (RQ3.b; KF 3.3).

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3.3: Acknowledging and accepting cultural differences, neutralising culture, adapting to cultural differences and maintaining constant communication with the partner were the most significant strategies that the PPP managers adopted to effectively manage their IOC differences</td>
<td>Newly emerging</td>
</tr>
</tbody>
</table>
Very little previous research has focused on the management of the IOC. Many researchers acknowledged that this research issue was rarely considered in the literature and called for further research into this vital area (e.g. Baumann, 2008; Chao, 2005; Lodorfos & Boateng, 2006; London, et al., 2005; Rundall, 2000). Further, the limited research found in the extant PPP literature and other related fields has mainly addressed the issue of cultural integration and compatibility in partnership settings. The assumption was that to improve the chances for PPP success (or to meet the partnership challenges), it is important that the sub-cultures of the organisations involved in the partnership be compatible (i.e. Bach & Whitehill, 2008; Knickman & Stone, 2007; Sabjanyi, 2006). Bach and Whitehill (2008) for example, suggested that there should be a ‘successful’ plan for cultural integration and compatibility of the cultures of the partnership organisations. However, the details of such a plan, particularly the ‘how’ and ‘what’ aspects, are left unspecified (see Table 5.20). Other research in this area has implicitly emphasised the importance of understanding the nature of the partnership culture as a pre-requisite condition for its management. To do so, Fox and Butler (2004) for example, offered their two-factor/dimension model: sociability and solidarity (discussed later in further detail).

In the current research, the successful plan to integrate the cultures of the partnering organisations in a more compatible culture that Bach and Whitehill (2008) called for, represented the approaches that managers in the researched PPP adopted to manage the cultural differences between their organisations (presented in Table 5.20). However, the need for leaders with the ‘cultural intelligence’ background that Fox and Butler (2004) suggested has not been reported in the current research as a necessary requirement to effectively manage the cultural differences between partners. This may be because the effective management approaches that the PPP managers adopted were sufficient enough to substitute for the proposed need for PPP culturally intelligent leadership. Nevertheless, Tierney et al. (2010) suggestion to establish mentoring relationships between experienced and less experienced partners found its support in this research. Twenty five percent of the managers interviewed mentioned that they provided their counterparts or their fellow partners with cultural orientation whenever there was a need and opportunity to do so.
Table 5.20: Approaches in the management of IOC identified in the literature and current study

<table>
<thead>
<tr>
<th>Approaches in the Management of IORs</th>
<th>The PPP literature</th>
<th>The Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Successful’ plan for cultural integration and compatibility</td>
<td>Bach &amp; Whitehill (2008)</td>
<td>The tandem approaches that PPP managers adopted to manage their cultural differences</td>
</tr>
<tr>
<td>Managing cultural differences requires a leader with ‘cultural intelligence’ background</td>
<td>Fox &amp; Butler (2004)</td>
<td>Not reported</td>
</tr>
<tr>
<td>Establishing mentoring relationships between experienced and less experienced partners</td>
<td>Tierney et al. (2010)</td>
<td>Self and others orientation</td>
</tr>
<tr>
<td>Acknowledgment and acceptance of cultural differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutralisation of culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility and adaptability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity of interaction and cooperation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third-party arbitration and intervention</td>
<td></td>
<td></td>
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<tr>
<td>Adopting a contingency approach</td>
<td></td>
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</tbody>
</table>

Overall, the answer to research question RQ3.b has provided a detailed view of the approaches that PPP managers adopted to minimise the negative impact of their cultural differences that was not available in earlier research. Therefore, this study has contributed to the extant PPP literature by offering a range of management approaches that can potentially be useful in other contexts to assist PPP partners and managers in managing their IOC differences more effectively.

5.3.3 IOC Characteristics (RQ.3.c; KF 3.4)

The following discusses the key findings from RQ3.c:

**RQ3.c: What are the characteristics of the inter-organisational culture (IOC) that exist between partnering organisations?**

The current research has investigated the characteristics of the IOC in a PPP setting. One key finding was reported in response to this research question. From this main theme (the characteristics of the IOC), a number of sub-themes emerged from the data. These themes offered a detailed description of the IOC characteristics in the researched PPP
organisations in Jordan. Table 5.21 provides a summary of the key findings for research question (RQ3.c; KF 3.4).

Table 5.21: Key findings for RQ3.c (Characteristics of the IOC; KF 3.4)

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Relation to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3.4: The inter-organisational culture (IOC) was viewed by the interviewees as different type of cultures, characterised by being reciprocal, flexible/responsive, respectful and equal culture</td>
<td>Newly emerging</td>
</tr>
</tbody>
</table>

Essentially, the aim of the current research to explore the cultural aspects in partnerships was guided by the assumption that the dynamics and interaction of two or more different organisational cultures in a partnership setting will potentially create a new cultural form that is different from the sub-cultures of the partnership organisations or the national culture that was thoroughly researched by Hofstede (2001) and Triandis (2002).

Conspicuously, research that was directed at exploring the nature and the cultural characteristics of two or more organisations involved in a partnership arrangement has been very scarce. Further, the very few research attempts in this area have broadly focused on describing and typifying different organisation cultures, with little emphasis on the type of cultures that exist in PPP settings. Very little previous research was initiated to explore and acknowledge the unique qualities of the type of culture that exists in a PPP setting. Surprisingly however, many researchers have acknowledged that managing in a PPP setting requires adopting new and different way of management, due to its ‘unique working environment’ (see Table 5.22). The uniqueness of the PPP working environment is an important requirement that qualifies it to have a ‘unique’ organisational culture (the IOC in this study).

Nevertheless, two research attempts to typify the kind of culture in a partnership setting were of great importance. The first was the study conducted by Fox and Butler (2004), and the second is Sabjanyi’s (2006) study. Fox & Butler (2004) have offered their view in a model that typifies and characterises different organisational cultures, based on their experience in a range of organisations and was ‘loosely’ based on Goffee and Jones’ (1998) categorisation of organisational cultures. In their model, the researchers considered two dimensions: sociability (a measure of friendliness) and solidarity (a
Managing PPP infrastructure projects in Jordan

The result of the interplay between these two dimensions has four cultural types: the fragmented, networked, mercenary and communal cultures. Likewise, Sabjanyi’s (2006) typology was based on two core dimensions: the compliant-challenging and the competitive-collaborative, with four cultural types: compliant, collaborative, challenging and competitive.

Table 5.22 The Characteristics of the partnership working environment

<table>
<thead>
<tr>
<th>In the literature</th>
<th>PPP Researchers</th>
<th>In the Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
<td><strong>Rationale</strong></td>
<td><strong>Findings</strong></td>
</tr>
<tr>
<td>Managing in a PPP setting is a new way of management</td>
<td>Requires unique managerial and technical competence and experience beyond the traditional managerial techniques and skills</td>
<td>Keast et al. (2004); Teisman &amp; Klijn (2002); Lasker, Weiss &amp; Miller (2001); Pessoa (2008); Jones &amp; Noble (2008); Bach &amp; Whitehill (2008); Keast &amp; Hampson (2007)</td>
</tr>
<tr>
<td>Partnerships are new, different and complex arrangements and field of PPP is still emerging</td>
<td>Entail a joint alliance between the two sectors beyond the traditional contractual relationship</td>
<td>Hodge. &amp; Greve. (2007); Neal (2010); Schaeffer &amp; Loveridge (2002); Siemiatycki (2010); Vining &amp; Boardam (2008); Pessoa (2008); Mandell &amp; Keast (2008)</td>
</tr>
</tbody>
</table>

The findings of the current research acknowledged the existence of the proposed inter-organisational culture (IOC) that emerges when two different organisations work together in a partnership arrangement. These findings supported the assumption that the type of culture that exits in a PPP setting is a unique culture that is different from the ‘traditional’ organisational and national types of culture. To this end, this research has identified the characteristics of the IOC in the Jordanian PPP context. The IOC in the PPP setting in Jordan was characterised by being reciprocal and flexible/responsive and based on respect and equality. This culture was supported by the positive working and relationship environment ‘frameworks’ identified previously in this research.
Using Fox and Butler (2004) and Sabjanyi’s (2006) typologies, and Bach and Whitehill’s (2008) adapted typology, the cultural attributes identified by the present research did not fully match any one particular type of the cultures that these researchers suggested in their models. On Fox and Butler’s (2004) map, the type of the IOC in the Jordanian PPP context is based on social relationships, with partners being open to discuss work and non-work matters (e.g. a networked culture), being driven by their passion for the organisation and a strong sense of community (e.g. a communal culture) and being driven to get things done with particular focus on goals (e.g. a mercenary culture). Using Sabjanyi’s (2006) and Bach and Whitehill’s (2008) typologies, the type of IOC identified in this research included collaborative, challenging and compliant cultural attributes. In response to this contentious finding, the answer to the question of whether these (or any other) typologies would be valid to characterise the nature of the inter-organisational culture in partnership organisations remains undecided. Further research is required to examine and validate the findings of this and earlier research to precisely identify the nature of the IOC in other PPP contexts.

Nevertheless, the answer to research question RQ.3.c has provided a detailed view of the nature of the IOC culture in the Jordanian PPP setting. This study supports the assumption that the working environment in a partnership arrangement is unique and different, thus managing in a PPP setting is a new way of management. Further, this research has extended the extant PPP literature by acknowledging the existence of the IOC in a PPP setting. Additionally, this study has contributed to the literature by identifying the characteristics of the IOC in Jordan.

In summary, the discussion of the key findings (KFs 3.1-4) resulting from RQ.3 and subsequent sub-research questions RQ3.a, RQ3.b and RQ3.c, which addressed the IOC context in Jordan, has shown that the current research reinforced, supported and contributed to the extant PPP literature in a number of areas. The answer to research questions RQ3.a and b has shown that the current research reinforced and supported the existence of two forms of IOC differences between partners (the institutional cultural and communicational-type differences). However, the existence of a third type of IOC differences (the power relationship differences) did not find enough support in this study. Further, the current research has contributed and extended the extant PPP literature in finding that the positive working/relationship environment and the
approaches that PPP managers adopted to manage their IOC outweighed the cultural differences and kept their negative impact minimal. Finally, the answer to research question RQ.3.c has extended the extant PPP literature by acknowledging the existence of the IOC in a PPP setting. It has also provided a detailed view of the nature and characteristic of the IOC culture in the Jordanian PPP setting.

CHAPTER 5 SUMMARY

In this chapter, the findings of the study, which were drawn from two Jordanian PPP infrastructure projects as case studies were discussed. The key findings of the study were related to the extant literature of three different (but interrelated) frameworks: public private partnerships (PPPs), inter-organisational relationships (IORs) and inter-organisational culture (IOC).

The discussion of the key findings resulting from research question (RQ.1; KFs 1.1-16), which addressed the PPP management in Jordan, has shown that the current research reinforced, supported and contributed to the extant PPP literature on a number of areas related to the most effective PPP management practices (RQ.1.a), the difficulties that face the management in the implementation phase of a PPP in Jordan (RQ1.b), the institutional differences between partners (RQ1.c), the type of management competency that is required to manage PPP-type projects (RQ.1d), the nature of the effective management and performance controls that PPP organisations put in place to oversee the progress of the PPP project (RQ1.e).

The discussion of the key findings resulting from research question (RQ.2; KFs 2.1-4) which addressed the nature of the IOR environment in Jordan, has shown that the current research reinforced, supported and contributed to the extant PPP literature on a number of areas related to the content, context and nature of the interaction between PPP partners (RQ2.a) and the management of IORs in Jordan (RQ2.b).

The discussion of the key findings resulting from research question (RQ.3; KFs 3.1-4) which addressed the IOC context in Jordan, has shown that the current research reinforced, supported and contributed to the extant PPP literature on a number of areas related to the incompatible aspects of the IOC in Jordan and their impact (RQ3.a),
managing the incompatible aspects (RQ.3.b) and the nature and characteristics of the IOC culture in the Jordanian PPP context (RQ.3.c).

Chapter 6 presents a discussion of the implications of the findings emanating from the three main frameworks utilised in this research. It also includes research directions and recommendations for future research in the field of study.
CHAPTER 6: CONCLUSIONS AND IMPLICATIONS

INTRODUCTION

The rationale for undertaking this study was driven by the concerns raised by many researchers in the field, suggesting that bringing together two organisations of different institutional and cultural backgrounds in a public private partnership (PPP) arrangement results in conflicts between partners, and consequently, PPP failure. Further, this research was guided by the belief that the way in which a PPP project is managed, and the extent to which inter-organisational relationships between partners (IORs) and inter-organisation culture issues (IOC) between partnering organisations are effectively handled, have substantial impact on the final outcome of the partnership process.

The implementation phase of a PPP lifecycle can be described as the most critical stage of the partnership development process, as it is the stage when partnership progresses from agreements, contracts and plans on paper and maps to an almost everyday life setting that involves the realities of interaction between partners. Hence, it is the stage where issues of difference between partners normally emerge and are addressed and managed. However, very little empirical research has been conducted internationally or in Jordan specifically, to offer deeper insights into the challenges that arise in the management of PPPs during their implementation, and the approaches followed to manage these challenging issues/situations. To address these gaps in the body of PPP literature, and taking two PPP projects in Jordan as case study organisations, this study has explored and analysed the challenges facing the PPP management during implementation. Specifically, it has provided insights into the ongoing managerial life of such hybridised organisations and the management of these challenging situations. It has provided a detailed view of the content and context in which partners operate or interact with each other and the management approaches they adopt to maintain their IORs, as well as the nature of IOC between partnering organisations in Jordan.

The significance of conducting the research in Jordan stemmed from that Jordan is one of the commonly users of PPPs. The government of Jordan (GoJ) is rapidly employing PPPs in the Jordanian market, as the economic development needs in the country are large. This is why the GoJ believes that investing in PPP projects is a key component of
the country’s economic development strategy. However, not much is known about the management of the implementation phase of Jordanian PPPs in either theory or practice, as PPPs are newly introduced to the Jordanian market and research in this vital area has not existed. For a developing country with limited natural resources such as Jordan, PPPs represents huge amounts of investment relative to Jordan’s small economy. Therefore, there was a critical need to review PPP experience in Jordan and conduct field research to explore the challenges facing the management of PPPs during their implementation. It is assumed that research provides PPP partners, managers and policy makers with valuable knowledge about PPP challenges during implementation and how to effectively manage PPPs. The result is establishing and managing PPPs with greater chances for success. Nevertheless, although this study is applied to the Jordanian PPPs, some of the findings may be generalisable across PPPs internationally.

Taking two PPP projects in Jordan as case study organisations, this research investigated the management of the implementation phase of PPP projects in the Jordanian context. The purpose of the research was to offer a better understanding of the challenges facing these PPPs in Jordan and examine the management milieu of these PPPs during their implementation phase. To do so, this study investigated the IOR and IOC milieus that are related to the management of the researched projects.

The key findings of this research were discussed in the previous chapter (Chapter 5) and were related to the literature on PPPs, IORs and IOC. This chapter provides conclusions based on the discussions and consists of three main sections. In the first section, an overview of the study including its aims, questions, methods and key findings is provided. In the second section, the study contributions and implications are presented. In the third section, research limitations and directions for future research are provided. An overview of the structure of this chapter in provided in Figure 6.1.
CHAPTER 6: CONCLUSIONS AND IMPLICATIONS

6.1 OVERVIEW OF THE STUDY

6.1.1 Research Aims and Questions

Research Aims

The purpose of this study was to understand and analyse the management of the implementation phase of PPP infrastructure projects in Jordan, and to model this understanding to assist in theorising about the effective management of PPP organisations. More specifically, this research aimed to explore the requirements for effective management practices in such PPP arrangements, the problems facing the implementation of PPP projects, the management expertise and competence and the controlling mechanisms that are most needed to manage PPP organisations.

Because of the link between PPPs and IORs, as PPP arrangements are described as a dyadic form of IORs (Van de Ven & Ferry, 1980), and the PPP literature alone does not provide a comprehensive and coherent view to understand the phenomenon being researched, this study has utilised previous research on IORs to support its arguments. The aim is to explore in detail the content, context and nature of IORs between partners in a PPP setting from a micro-level perspective, and examine the management approaches that partner managers follow to maintain their IORs. Using the same
reasons, the study employed previous research on IOCs to support its grounds and explicate the cultural milieus between partnering organisations. Specifically, this research aimed to explore the existence and nature of the cultural differences between two partnering organisations representing different organisational cultures and examine the degree of their cultural compatibility and the impact of the culturally incompatible aspects on the management of PPPs in Jordan. Further, the study also aimed to examine the characteristics and management of the inter-organisational culture (IOC) that exists in situations where two or more organisations are involved in partnering relationships.

Finally, this research has been undertaken in response to identification of the need to critically review the experience of PPPs internationally through gathering evidence from different countries in order to better grasp what a PPP is and how it should be understood and managed (Hodge & Greve, 2007). Understanding of PPP as a phenomenon was elucidated through reviewing PPP literature and analysing practices within two case study organisations in Jordan.

**Research Questions**

Following a review of the literature on PPPs, IORs and IOC, a number of gaps in the literature were identified which provided a basis for investigation in the thesis. The overarching research problem that this study addressed was:

**How effectively managed is the implementation of PPP infrastructure projects in Jordan, as perceived by their managers?**

To answer this research problem and to address the gaps identified in the extant literature, three main research questions and ten sub-research questions were developed. These research questions were:
6.1.2 Research Methods

Due to the limited research on the management of PPPs during implementation (as a subject of inquiry), this research was designed to be an exploratory study as it was ontologically-oriented to answer ‘what’ and ‘how’ type of research questions (Creswell, 1998; Vaus, 2001). A qualitative research design, using in-depth interviews was chosen to collect data from two different PPP infrastructure projects in Jordan as case study organisations selected based on theoretical sampling techniques and other criteria such as access and convenience. The choice of qualitative research design was informed (among other factors) by the objectives of this research to provide a detailed view of the phenomenon under study and to allow collecting very detailed, rich and extensive data to facilitate exploration of issues in a more flexible and less structured format. Thus, qualitative research design enables a greater understanding of the phenomenon under study and the potential for new insights and perspectives to emerge which is most needed for the current research.

The data collection utilised an open-ended, semi-structured interview technique. The interview questions were developed from the research questions, which were developed from the literature reviewed on PPPs and two other related fields utilised in this research, namely, IORs and IOC. The convergent-type interviewing technique was utilised to refine the interview questions and to ensure their validity and relevancy. Data

**RQ.1: How is the implementation phase of Jordanian PPPs managed?**
- RQ.1.a: What are effective practices in managing the implementation phase of PPPs?
- RQ.1.b: What are the difficulties facing the management of PPPs?
- RQ.1.c: How well managed are institutional differences between partners PPPs?
- RQ.1.d: What management expertise and competency is needed in managing PPPs?
- RQ.1.e: What are the effective performance monitoring and controlling mechanisms used to oversee the progress of PPPs?

**RQ.2: What is the IOR environment in managing the Jordanian PPPs?**
- RQ2.a: What is the content, context and nature of the inter-organisational relations (IORs) between PPP partners in Jordan?
- RQ2.b: How well managed are the IORs between PPP partners in Jordan?

**RQ.3: What is the IOC context in the management of PPPs in Jordan?**
- RQ3.a: How compatible is the inter-organisational culture (IOC) in the Jordanian PPP settings?
- RQ3.b: How well managed is the inter-organisational culture (IOC) between PPP partners in Jordan?
- RQ3.c: What are the characteristics of the inter-organisational culture (IOC) that exists between partnering organisations?
were also collected from media, news releases and websites to triangulate the data collected and support data analysis processes, where relevant.

Senior level management employees from different partnering organisations in each PPP project were selected to participate in the study. A total of 21 interviews were conducted in both case study organisations. Interviews were conducted in Arabic and English in Jordan during September 2009 and January 2010. Prior to data analysis, Arabic interview transcripts were translated into English by the researcher and back-translated by a second accredited Arabic-English translator, to ensure the accuracy of the translated material. Content thematic analysis was used to analyse the data collected from the interviews and other sources.

6.1.3 Key Findings of the Research

In this section, discussion focuses on the key findings from the three main frameworks utilised in the thesis that included: PPP management of the implementation phase (RQ.1; KFs 1.1-16); inter-organisational relationships (IORs) environment in managing the Jordanian PPPs (RQ2; KFs 2.1-4); and inter-organisational culture (IOC) context in the management of PPPs in Jordan (RQ3; KFs 3.1-4).

Findings about PPP Management of the implementation phase (RQ1; KFs 1.1-16)

Key findings of the study that are related to the PPP management in Jordan involved effective practices for managing PPPs, difficulties that face the management of PPPs, institutional differences between partners, management expertise required to manage PPPs, and monitoring and controlling mechanisms used to oversee the progress of PPPs.

In the PPP management framework, the study has found that five main practices had substantial positive impact on effective management of PPPs in Jordan. These practices included certain issues related to the management of human resources, working closely with the other partner, the project agreement, monitoring the progress of the PPP project, prior experience in managing PPPs. It was found that a well-established project agreement that included a detailed description of roles and responsibilities for each partner worked effectively in the absence of the PPP institutional / legal framework.
This project agreement served as a critical factor in the effective management of the studied PPP projects.

The research also identified a number of internal difficulties that PPP managers experienced in managing their organisations such as staff shortages and lack of sufficient knowledge and experience of the public partner. The study also identified other types of difficulties that stemmed from external forces than those mentioned in the literature. These included the external unexpected changes and pressures and coordination and communication difficulties.

Many PPP researchers identified several areas where organisations representing varying institutional frameworks differ. More importantly, many researchers raised concerns about the viability of partnership between two organisations with different organisational and structural backgrounds in being able to produce effective results. This research also identified a number of issues where institutional differences between partners existed and elucidated their impact on the management of PPPs. These areas included the internal decision-making processes, institutional orientation, degree of flexibility, and, views. However, with the exception of two areas (the differences in the internal decision making and taking processes, and the differences in expectations and views between partners), the impact of these differences on the performance of the researched PPPs was found to be limited. The findings indicated that PPP managers underestimated the negative impact of these differences on the performance of their PPPs and the relationship between them as partners due to a number of safeguards that limited the impact of their differences. Examples of these safeguards were: awareness of the institutional differences, mutuality of goals between partners, well-detailed project agreement and perpetuation of positive attitude in the researched PPPs. Further, it was found that PPP managers have also developed and adopted a set of practical approaches and strategies that they have learnt by experience and applied to effectively manage the institutional differences between their organisations. Examples of these approaches were: establishing effective communication, compromising and experience accumulation.

Additionally, PPP managers have developed a set of strategies to deal with each area of their institutional differences. For example, they established informal networks and
developed alternative plans to apply in different situational scenarios to deal with the differences in their internal systems and procedures, to assist them become more efficient in handling such differences. In the case of the ‘classical separation’/orientation and the degree of flexibility between partner, being aware of these differences and accepting them as they were, partner managers directed their efforts to handle their differences separately from the ‘private’ concerns of the other partner whenever possible. Overall, the management safeguards and approaches that PPP managers in Jordan adopted have limited the impact of the institutional differences or the conflicts in interests and goals between partners (whenever they emerged) on the performance of the researched PPPs and the relationship between partners.

Further, the findings of the study suggested that adaptability and flexibility, ‘scoping in/out’ ability, and, patience and self-motivation were important personal qualities and abilities that PPP managers should have. The type of skills, expertise and experiences that PPP managers needed to effectively manage their projects were the social and interpersonal skills, project management experience and skills, communication skills, and, technical, negotiation and arbitration experience. In addition, PPP managers were required to be well-qualified and knowledgeable in managing the technical and financial aspects of the PPP projects, and be familiar with, and use programming and scheduling techniques.

Finally, the current research has shown that partners have established and implemented a number of different (but not contradictory) internal controlling mechanisms. Complying with the project agreement, following up progress reports and applying specialised monitoring techniques were the most common monitoring and controlling mechanisms that PPP managers used to oversee the progress of their PPP projects. These practices and techniques substantially assisted PPP managers to effectively manage their projects. Further, the findings have shown that the differences in the type of controls used by one partner, did not conflict with the controls used by the other partner. In situations where these mechanisms gave inconsistent readings, PPP managers met to discuss these variations and agreed on remedial action (whenever needed). In other words, these controls complemented and supported each other.
Findings about the IOR Environment in the Jordanian PPPs (RQ2; KFs 2.1-4)

Key findings about the IORs framework were specifically drawn from the results of exploring the nature of the inter-organisational relations between PPP partners (RQ2.a; KFs 2.1-3) and the management of these relationships in Jordan (RQ2.b; KF 2.4).

In responding to research question RQ2.a, the content (the purpose, frequency and methods) and context (the constraints) of the IORs between partners was explored. With regards to the content of IORs between Jordanian PPP partners, the study findings indicated that most of the interaction between partner managers has mainly aimed to discuss progress, coordinate activities and take decisions. Partners also had frequent direct and indirect interaction with each other and whenever the need arose. This interaction took place on a regular basis, mostly through mail, phone calls and face-to-face communication. In terms of the context of the IORs, the study has found that the heavy workload and stressful working conditions, time pressures, scarcity of financial resources and coordination difficulties were the most common constraints that impacted on the frequency of that interaction between partner managers. Despite these constraints, PPP managers believed that continuous communication, coordination and joint decision-making with their counterparts promoted conditions of a more positive relationship environment (PRE) and, consequently, successful and trusting relationships.

Exploring the nature of the relationship between PPP partners was also another issue that this research explored. The research found that the nature of the IORs in the researched PPPs has been located veering to the right-hand side that represents a tendency for strong relationships on the 5-point scale that this research introduced. Further, the study found that the nature of the relationships between partnering organisations in Jordan was strong enough to keep the progress of the PPP projects steady and on track. According to the PRE framework suggested within this research, the Jordanian PPP partners experienced productive and effective inter-organisational relationships during the course of the management of the implementation phase of their PPP projects.

The study specifically identified the management approaches that partners adopted to maintain and manage their inter-organisational relationships (RQ2.b). The findings of
the research indicated that partner managers have established a host of approaches to maintain their relationships. The project agreement was particularly viewed as a regulator of the partners’ formal relationships. It was also found that working closely and continually with the partner, having a positive attitude, abiding with the established channels of communication, engaging third-parties, and learning by experience, were among the most effective approaches that PPP managers adopted to manage their IORs. Further, it was found that partners, when faced with relationship difficulties, sought third party arbitration. They also utilised their past relationship experience with the other partner to handle newly emerging relationship difficulties. Partners in the case study organisations were persistently ready and keen to maintain effective relationships.

**Findings about the IOC Context in the Jordanian PPPs (RQ3; KFs 3.1-4)**

Key findings about the IOC framework were specifically drawn from the results of exploring the nature of the inter-organisation cultural compatibility (RQ3.a; KFs 3.1-2), management (RQ 3.b; KF 3.3) and the characteristics of inter-organisational culture in the Jordanian PPP context (RQ3.b; KF 3.4).

The degree of *compatibility* in the cultures of two organisations involved in the partnership setting is considered by many researchers as a critically important factor to the effective performance of PPPs. This research has explored the existence of IOC differences and the degree of compatibility between the cultures of two partnering organisations in a PPP setting.

A review of previous research concluded that IOC differences take three forms: institutional cultural, communicational and power relationship differences. The findings of the study acknowledged the existence of the institutional type of cultural differences that represent the way activities are prioritised and accomplished, in addition to the differences in the management approaches and focus and orientation that each partner exhibits. It was also found that partners experienced some difficulties that resulted from communication type of cultural differences, especially at the beginning of the project. However, this research did not find enough support for the existence of power relationship differences between partners in the Jordanian context.
More importantly, the cultural differences between partners that this research found had little negative impact on the performance of the researched PPPs. Partners were able to limit and/or neutralise the negative impact of their cultural differences. They viewed these differences positively and explained them as being more objective, culturally-neutral values more than being subjective cultural differences. This was because partners have developed a shared understanding of their cultural differences with time and experience of working together. The lesson learnt from two Jordanian PPP projects was that the positive working/relationship environment outweighed the cultural and institutional differences and challenges that faced PPP management.

The study has explored the management approaches used by the PPP partners to manage their IOC differences. It was found that the successful plan to integrate the cultures of the partnering organisations in a more compatible culture that some PPP researchers called for (e.g. Bach & Whitehill, 2008), represented the approaches that PPP managers in this study adopted to manage their IOC differences. Acknowledging and accepting cultural differences, neutralising culture, adapting to cultural differences and maintaining constant communication with the partner were the most significant strategies that the PPP managers adopted to effectively manage their IOC differences.

This study has acknowledged the existence of the proposed inter-organisational culture (IOC) that emerges when two different organisations work together in a partnership arrangement. The current research has investigated the characteristics of the IOC in a PPP setting and found that IOC is a different form of culture, characterised by being complementary, flexible, respective, responsive and reciprocal. It was also found that IOC is a new form of culture that is different from national and organisational cultures. This culture was supported by the positive working and relationship environment ‘frameworks’ identified previously in this research. Further, on Fox and Butler’s (2004) map, the form of the IOC in the Jordanian PPP context was based on social relationships, with partners being open to discuss work and non-work matters, being driven by their passion for the organisation success and a strong sense of community with particular focus on goals. Using Sabjanyi’s (2006) and Bach and Whitehill’s (2008) typologies, the type of IOC identified in this research involved collaborative, challenging and compliant cultural attributes. Additionally, this study found that the
working environment in a partnership arrangement is unique and different, thus managing in a PPP setting is a new way of management.

6.2 THE STUDY CONTRIBUTIONS AND IMPLICATIONS

As noted previously, this study is one of the very few scholarly research efforts, both internationally, and in Jordan, to specifically explore the management of PPPs in the implementation phase of development. International PPP research is lacking a substantive, holistic view of the content and context in which partners operate or interact (Fischbacher & Beaumont, 2003; Klijn & Teisman, 2000). To date, much of the international PPP research has been directed to evaluating the policy aspects of establishing specific PPPs in their early stages of development. Therefore, managing the implementation phase of PPPs has yielded very little attention by researchers. In Jordan particularly, field research that is specifically and directly related to exploring and examining the challenges facing the effective management of PPPs during their implementation has not been undertaken.

This study has explored the nature and characteristics of new form of culture (the inter-organisational culture), which has emerged in a PPP environment. Exploring this form of organisational culture will positively contribute to its development in future research and practice. In addition, this study can be considered as pioneering in respect to utilising literature on IOC as a contextual framework specifically to explore the management of PPPs. Previous research has mainly addressed PPPs as a relatively ‘separate’ or ‘independent’ unit of inquiry, or at most as an example of IORs in the context of networks, networking theories or governance paradigms and models. This study has extended the extant PPP literature by viewing and studying PPPs in the context of other potentially related research frameworks that have impact on the management of these projects. For example, in addition to studying PPPs in relation to IORs, this study has empirically explored PPPs in relation to a broader context that involves IOC. This is anticipated to have very significant implications on the present and future PPP theory and practice. It will also pave the way for looking at PPPs in the context of other potentially related frameworks in future, such as stakeholders’ involvement and stakeholder theories. Utilising other related research frameworks is also an important effort for establishing the fundamentals of a more coherent and
Managing PPP infrastructure projects in Jordan

reliable PPP theory. Figure 6.2 displays the difference in the two views and the anticipated PPP future directions.

Figure 6.2: Previous PPP research, the current research and anticipated future directions for PPPs

The contributions of the current research to the three main frameworks utilised in the current research (PPP management, inter-organisational relationships and inter-organisational culture) are discussed in detail in the next section.

6.2.1 Theoretical Contributions of the Research

Contributions to the PPP Management Literature

A major contribution of this study to the PPP management included contributions that are related to effective PPP management practices, difficulties that face the management of PPPs, institutional differences between partners, management expertise required to manage PPPs, and monitoring and controlling mechanisms used to oversee the progress of PPPs.

In **PPP management practices**, the present study extended the extant PPP literature in regard to highlighting the importance of developing local staff to take up the PPP management responsibilities and achieve more sustainable long-term objectives. Additionally, knowledge and prior experience in managing PPP projects was one of the important factors that improved the abilities of the PPP managers to effectively manage
their PPPs. The study also provided empirical evidence that managing PPPs is a different type of management.

Most of the PPP management difficulties that have been identified in the PPP literature were related to external pressures and to their impact on the PPP management. This study extended the extant PPP literature about the existence of internal management difficulties and their significant impact on the overall outcome of PPP performance management. Examples of these difficulties were staff shortages and lack of sufficient knowledge and experience in managing PPP-type organisations, especially in relation to the public partner.

Key findings about the difficulties facing PPP management have shown that this study provided an in-depth understanding of the nature of the difficulties that PPP managers experience in managing their PPPs. It has conceptualised the cause-effect relationships between the internal and external difficulties that PPPs face during their implementation and their potential consequences for the effective management of these PPPs. Based on the findings of this research, it suggested that the existence of, and interplay between internal and external management difficulties, with the absence of an agreed-upon plan to handle such difficulties, creates an environment of prolonged unresolved problems and potentially results in poor PPP management and failure.

With respect to the institutional differences between partners, this research has expanded the PPP literature by explicating what can be considered as built-in safeguards that worked effectively in limiting the impact of the institutional differences between partners. Having mutual objectives and ends, a well-detailed project agreement and partners’ awareness of their rights and obligations are examples of these safeguards. The present study has also contributed to the extant PPP research by suggesting that PPP effectiveness can potentially be determined by the extent to which the management approaches and the built-in safeguards are effective in eliminating the potential negative impact of the forces (caused by the institutional differences) on the overall performance of a PPP arrangement.

In response to the question that some researchers raised about whether the PPP management skills, expertise and competence in traditional command-and-control structures fit into a multi-organisational partnership environment, and whether any other
sets of skills are instrumental in the management of PPPs, the current research identified, in detail, what can be considered as a personal attribute, experience, skill and/or knowledge that is important for the effective management of a PPP organisation. Simultaneously, it has established a division between qualities and abilities that PPP managers should personally have before being engaged/involved in a PPP project, and the skills and knowledge that the PPP organisation can provide to the PPP managers to assist them in building their potential capacity for more effective PPP management performance. Further, the current research provided a wide-ranging account of the type of qualities, skills, experiences and knowledge that should be available for the PPP managers to manage effectively which was not fully available in the previous PPP research.

A detailed knowledge of the **PPP management controlling mechanisms** and the specialised techniques that PPP organisations implement to oversee the progress of the PPP project had been insufficiently addressed in the extant PPP literature. The current research has contributed to the PPP literature in explicating the nature of the management and performance controls that PPP organisations implement that proved effective in overseeing the progress of the PPP project.

**Theoretical Contributions to the IORs in the context of PPPs**

Previous research on IORs has broadly addressed the relationship development between partners from a macro-level perspective. The detailed *nature* of these relationships from a micro-level perspective was rarely empirically examined or explored. This study has explored the content, context and nature of IORs in the Jordanian PPPs and extended the extant PPP literature in providing a more detailed account of the IORs between partners in a PPP setting during the implementation phase of the partnership which was not available in previous PPP research.

Further, previous research on PPPs that addressed the IORs between partners has mainly focused on the process of their relationship development by typifying these relationships. Not only have these typologies differed considerably among them, but also represented inconsistency in the researchers’ views about the type, nature and development of these IORs between PPP partners. To assist in understanding of the nature of these relationships, this study has offered a 5-point scale that typifies IORs...
from a strong, well-established relationship on one end to a more fragmented inconsistent relationship on the other end.

Moreover, based on the findings of the current research, this study contributed to the literature by introducing a framework for a PRE that describes and characterises the nature of inter-organisational relations in a PPP context. The PRE framework, which was developed based on previous IOR literature as well as this research, suggests that the IORs between partners are characterised by being based (among other factors) on mutuality of objectives, equality, trust and commitment.

Very little attention was given in previous research to the management approaches that PPP managers adopt to manage their IORs, and the extent to which these approaches are effective in maintaining well-established and strong relationships between partners. This research has contributed to the PPP literature by empirically exploring these two important research issues. Further, it has extended the extant literature in reporting two other approaches adopted by partners to deal with their relationship difficulties and maintain a more productive IOR between them than those mentioned in the previous research. These were: third party arbitration and learning by past relationship experience with the other partner.

Theoretical Contributions to the IOC in a PPP Setting

This research has explored the existence and nature of the cultural differences between two partnering organisations representing different organisational cultures, empirically examined the degree of their cultural compatibility and the impact of the culturally incompatible aspects for the management of PPPs in Jordan, which were all under-researched issues in the PPP literature. Further, the assumptions offered by researchers in the field in regard to these issues needed empirical verification, which this research has provided. This study has also extended the extant PPP literature by exploring the impact of IOC differences on PPP management. Specifically, partners could limit the negative consequences of their IOC differences by being aware and previously experiencing the IOC differences, having mutual goals and enjoying a positive working environment.
Managing the IOC was rarely considered in the previous PPP literature. The little research in this area has called for exploration and understanding of the nature of culture in a partnership setting as a pre-requisite condition for its management. Also, research in this area was driven by the assumption that PPP success is subject to the cultures of partnership organisations being compatible. Therefore, some researchers suggested that there should be a ‘successful’ plan for cultural integration and compatibility of the cultures of the partnership organisations. However, such a plan was left unspecified. This study has provided a detailed view of the approaches that PPP managers adopted to minimise the negative impact of their inter-organisational cultural differences which was not available in earlier research. The research has offered a range of management approaches that can potentially be useful in other contexts to assist PPP partner managers in managing their IOC differences more effectively.

Research directed at exploring the nature and the cultural characteristics of two or more organisations involved in a partnership arrangement has been very scarce. The limited research attempts in this area have broadly focused on typifying organisational cultures. This research has contributed to the extant PPP literature by exploring the nature and characteristics of the culture in a PPP setting. It has also introduced a new form of culture with unique qualities that is different from national and organisational cultural forms. This research has provided a detailed view of the nature of this culture (the IOC) in the PPP context in Jordan.

Finally, as previously noted, PPPs in Jordan, as well as in other MENA countries, are newly introduced mechanisms for the production and delivery of public services and goods. Research to review these experiences and explore and the challenges facing the management of PPPs during their implementation was genuinely needed. As such, this study has contributed to the PPP research in Jordan by providing the basis for further research to be undertaken in this vital area and probably in other PPP projects in other sectors. Future PPP research in Jordan will benefit from the findings of this research by taking into account the most effective PPP practices, the nature of the difficulties in managing PPPs, the institutional differences between partners, the PPP management skills and competency requirements and the nature of the monitoring techniques to oversee PPPs in the country. Further, this study will assist and pave the way for the future PPP research in Jordan to conduct in-depth research to explore the impact of
IORs, IOC and may be other related contextual frameworks (e.g. stakeholders’ involvement and stakeholder theories) on the management of PPPs in other sectors. Overall, the research has contributed to the literature on PPPs in providing a detailed picture of the management of these arrangements in one of the developing countries towards potentially replicable PPP management models, and probably a universal PPP management theory.

6.2.2 Implications of the Research

6.2.2.1 Implications for research on PPP management, IORs and IOC

Implications of the research on PPP management

This research has provided ample evidence that managing PPP-type organisations is a different form of management. It is different from the traditional management styles with ‘visible’ hierarchical structures and clear authority lines. Therefore, knowledge and prior experience in managing PPPs have proved to be important requirements for more effective PPP performance and outcomes. Further, because PPPs are long-term arrangements, developing local staff was important to achieve the long-term PPP sustainable objectives.

Previous research on PPPs has focused on the external pressures and difficulties that managers usually experience in managing their PPPs. In addition to the external management difficulties, this study has identified a number of internal management difficulties that PPP managers face in managing their PPP projects. Researchers of PPP management need to consider both types of management difficulties when theorising on the factors that may improve or hinder PPP management performance. Additionally, PPP management researchers are required to reconsider the way they view these difficulties from being fragmented with an unorganised pattern to a more systematic cause-effect interactional relationship that this research has revealed.

PPP management researchers are also required to review their assumptions about the institutional differences between partnering organisations based on the details of the nature of these differences that this research has provided. Many researchers in this field of study assumed that the differences between partners (due to their very different
institutional and structural backgrounds) will naturally impact adversely on the PPP performance and outcomes. However, the built-in safeguards that assisted partners to deal with their institutional differences, which worked effectively in limiting the impact of these differences is a ‘phenomenon’ that needs special attention by researchers.

The wide-ranging account of the type and nature of management competency requirements to manage effectively in a PPP environment that this research has identified, and modelling these competencies into organisation-related/individual manager-related, will assist in better understanding of these competencies and the way of viewing and studying them. Likewise, the PPP management controlling mechanisms that PPP managers in this research implemented add to our understanding of the requirements for effective management in a PPP environment.

Finally, this study has concluded that a partnership arrangement that involve partners that have diverse backgrounds, if effectively managed, is possible to achieve successful results. Differences between partners, when they are accepted by them easily and regarded as normal, can create a positive relationship environment and produce positive partnership outcomes. The positive results can emerge from hybridisation of comparative advantages of partners that stem from their differences. The experience learnt from the researched PPPs in Jordan illustrated that positive partnership atmosphere can create conditions to develop workable solutions to the differences between partners and the difficulties they face during the course of their partnership.

**Implications of the research on IORs**

Very little research has addressed or applied IORs beyond the boundaries of network theory and networking arrangements. This may be because many IORs researchers are not yet definite (or have not yet agreed) that a PPP arrangement can be considered as one of the forms of networks. This study has proved that PPPs are one of the three networks types (the dyadic type) that Van de Ven and Ferry (1980) presented in their IORs typology. Therefore, this research is considered one important step towards exploring the IORs in other contexts, such as the case in a PPP setting. Importantly, exploring and examining the nature of the relationships between partnering organisations in a PPP setting will assist in the development of IORs by expanding its
boundaries and applications to other related fields of research such as PPPs. Likewise, research on IORs can help enrich, inform and explain the logics and realities of partnerships in a PPP setting. Further, this research has provided a detailed account of the content, context and nature of the IORs between partner organisations from a micro-level perspective. This had been inadequately addressed in the extant previous research on PPPs or IORs.

Based on the above, and taking the inter-relatedness between PPPs and IORs into account, it is anticipated that these two fields of study will witness more integrative efforts in future research and practice. This development will particularly include areas such as IOR process and management strategies that partners (in a PPP arrangement) or members (in a networked setting) adopt to maintain their relationships. The 5-point scale suggested by this research that typifies IORs from a well-established to a more fragmented relationship type will assist in this integration process and facilitate evaluating the interaction between partners during the ongoing relationship lifecycle. Moreover, the positive relationship environment (PRE) framework that this research has introduced will have substantial research implications. In theorising about what makes IORs between partner managers an effective practice, researchers need to consider the characteristics of the PRE mentioned in this research and assess the effectiveness of the IORs accordingly. Finally, exploring the nature of the IORs between Jordanian PPP partners has expanded the boundaries of the literature on IORs in PPP settings by considering the significant impact, process and details of the content (the purpose, frequency and methods) and context (the constraints) of the interaction between partners on the outcome of their inter-organisational relationships.

Implications of the research on IOC

The assumption that a partnership that involves organisations with different cultural backgrounds is difficult to achieve successful outcomes has proved invalid in the current research. First, not all of the IOC differences that were reported in the previous research were evident in the researched PPPs in this study. Second, even those differences in IOC that the current research revealed have only had limited impact on the management of the researched PPP projects. The partner managers were able to limit the negative consequences of their IOC differences by being aware of and
previously experiencing such differences, having mutual goals and enjoying a positive working environment. This key finding has substantial research implications. This research revealed that there are other ‘less linear’ or more subjective variables which come into play during the partnership process than those proposed by PPP researchers.

Importantly, the management approaches that PPP managers adopted to minimise the negative impact of their cultural differences can potentially be useful in other contexts (in theory and application) to assist partner managers in managing their IOC differences more effectively. Finally, and most significantly, the characteristics of inter-organisational culture in a PPP setting that has emerged from this research will have important implications for this emerging field of research. Such hybridised culture (with unique qualities), that is different from national or organisation cultural forms can be further explored in other theoretical frameworks (within and beyond PPPs) or other application contexts (internationally) to confirm its existence (or otherwise) and describe its nature and examine its impact.

6.2.2.2 Implications for PPP managers and policy makers

For practitioners and managers, the insights that this research has provided into the management of PPPs will assist them in managing their PPP projects more effectively. For managers and policy makers alike, expanding knowledge on the management of PPPs will greatly improve the chances for their success, and consequently prevent loss of huge investments in the PPP market worldwide, particularly in the developing economies such as Jordan where resources are scarce. This research will also help to improve understanding of PPP managers of how well partnerships are (and should be) managed in a way that reflects positively on their management performance and enhances their skills to manage PPP projects more effectively. It is suggested that both partners are required to adopt effective practical approaches and develop and/or custom-tailor and enforce built-in safeguards (such as the ones mentioned in this research) to effectively deal with their differences during the implementation phase of their PPP projects.

Because managing in multi-sectoral, multi-relational, multi-cultural and/or multilateral-type organisational settings was acknowledged in the PPP literature and this study, as a different form of management, PPP managers are required to make a shift in their roles
and their ways of viewing and doing things. They are required to be more flexible and effective in responding to the unexpected changes in the environment that are more common occurrences in managing PPPs than occurs in traditional unilaterally-owned organisations. Further, to manage PPPs more effectively, PPP managers are required to establish and or develop performance parameters, outcome measures and reporting systems prior to the project implementation process.

This research also has important policy implications for policy makers about the challenges that PPPs could face during their implementation and to improve their knowledge in making more rational policies and decisions relating the establishment and management of PPPs. For example, a well-designed and comprehensively established project agreement that fully details the expected performance outcomes of the PPP project that are agreed upon by partners before it commences was one of the most effective practices in the management of PPP projects, no matter how different were the controlling mechanisms adopted internally by each partner. Further, when establishing PPP projects, policy makers and managers need to ensure whether the characteristics of the PRE are anticipated to be evident in the proposed project, and create the conditions to facilitate institutionalising these features, before the commencement of the project. The lessons learnt from the PPP management skills, approaches and practices of the two case study organisations in Jordan will have important implications for creating more effective PPPs in other contexts regionally and internationally.

The detailed overview of the nature of the IORs between PPP partners that this research has provided, will expand the knowledge of PPP managers and policy makers on what might be happening in this phase of the PPP project and how relationships are developed between partners during the implementation phase of their partnership. In addition, the findings of this study will provide greater understanding for PPP managers and policy makers about the obstacles and difficulties that might face the relationship between partners during the implementation phase of PPP projects. The 5-point scale and the PRE framework that this study introduced can be very helpful tools for PPP partners and managers to assess the progress and effectiveness of their relationships and the management approaches that can be adopted to improve and maintain these relationships during the implementation phase of their PPP project.
Finally, the findings of this study about the IOC context will improve the understanding of PPP managers and practitioners, in Jordan and internationally, about the cultural aspects of their partnering relationships. Particularly, it will improve their awareness of the cultural differences between partners and their influences and the management approaches that they can adopt to minimise the negative aspects of these differences. The experience gained and the lessons learnt from the case study PPPs in Jordan, will assist Jordanian and international PPP managers in managing their IOC differences more effectively. Particularly, managers of foreign private firms entering cross-cultural PPP markets, the findings of this research will provide them with awareness of differences such as the institutional cultural, communicational and power relationships elucidated in this research, the kind of difficulties and challenges that they may experience, and the strategies and approaches that they can adopt to handle these challenges. The findings of this research suggest that establishing partnership initiatives between partners with incompatible cultural backgrounds is possible in countries such as Jordan, where a positive working/relationship environment outweighs cultural incompatibilities.

6.3 LIMITATIONS AND FUTURE RESEARCH

6.3.1 Limitations

An exploratory case study approach, by its very nature, is bound in not being fully generalisable. There are limitations about the extent to which results from this study can be generalised beyond the two case organisations selected for investigation in this research (e.g. external validity). However, case studies are not designed to provide a basis for making statistically valid generalisation beyond themselves; they do not strive for this type of external validity. They are designed to help understand a phenomenon/and develop, refine and test theories. They do this using the logic of replication (Eriksson & Kovalainen, 2008). Hence, the two case study organisations were chosen as unique cases and representing two different stages of a PPP development lifecycle (the construction and delivery stages). Therefore, they were internally heterogeneous (to obtain richer information) and externally homogeneous (to provide basis for consistent comparison). Hence, the organisations chosen for this research may have represented other similar infrastructure projects in Jordan and MENA countries, as the challenges and issues surrounding the management of these PPPs in the implementation phase of development are likely to have very similar
attributes. The IOC and strategic management directions are also likely to be similar across the whole MENA region. Nevertheless, it is important to acknowledge limitations of the research.

This research utilised the perceptions of the PPP managers interviewed as a main determinant for exploring the effectiveness of the case study organisations. First, it was not possible for this research to examine the impact of stakeholders (e.g. bodies, institutions, unions) and consider their views and the nature of their involvement, relationship and interaction with the primary partners in the process of managing the implementation of the researched projects due to time and resource constraints and access difficulties. However, examining the impact of stakeholders on the way PPPs are managed and implemented will require a separate research effort of its own. Second, for the same reasons, this research sought to obtain one type of respondent (e.g. perceptions of the PPP managers). It might have been valuable to seek the perceptions of other people involved in the partnership process such as employees, ‘parent’ and ‘participant’ partners. However, targeting PPP managers was informed by the research objectives to obtain information about the management of PPPs and the assumption that PPP managers are the most knowledgeable subject of inquiry. Third, because a PPP arrangement can be described as a multi-disciplinary research area, a coherent and/or agreed upon effectiveness measurement framework to precisely assess the extent to which a PPP arrangement is effectively managed, or broadly achieve its objectives, is not yet available in the extant literature.

6.3.2 Issues for Future Research

Future research needs to consider the previously mentioned limitations and delimitations of this study. In particular, future research could use other case studies from different geographic and socio-economic locations regionally and internationally. An extension to this, would be to use PPP case studies from other industry settings such as education, health, information technology or energy, in Jordan, the MENA region and/or worldwide.

44 Nevertheless, the initial efforts to include stakeholders in the current research (such as the Ministry of Environment, the Consumer Protection Association, the Farmers Union) has revealed that their involvement in the projects researched was very minimal, and consequently, they would have been unlikely to have added much value to the research.
In the **PPP management** framework, further research is required to explore whether there are any other management competency requirements (other than those identified by this research) that closely related to the effective management of PPPs. Further, whether these competencies are different or similar to what is required in the traditional command-and-control management structures needs further research.

Further research is also required to examine the built-in safeguards that worked effectively in limiting the impact of the institutional differences between partners in the Jordanian context. Having mutual objectives and ends, a well-detailed project agreement and partners’ awareness of their rights and obligations are examples of these safeguards. Additionally, international research can be focused on how the socio-cultural, economic and political environment shape PPP in any country. Further, the issue of trust between partners has mainly been addressed in relation to other inter-organisational arrangements such as alliances and networks, and has yielded less emphasis in PPP contractual arrangements. Therefore, a research is needed to investigate the role of trust in other complex partnership arrangements that are based on previously established contractual relationships such as PPPs.

In the **IOR** framework, there is a need to devise a more detailed assessment tool derived from the 5-point scale (suggested by this research) that typifies IORs between partners to assist in evaluating the effectiveness of the interaction between partners during their ongoing relationship lifecycle. The extent to which the prerequisite requirements/factors to establish more effective partnering relationships (such as the compatibility of partners’ goals and coordination between them in decision making that were identified by this research), also have significantly participated in the management of relationship difficulties between partners has remained underexplored. Further research is needed to examine the impact of these (and maybe other) prerequisite factors on the management of IORs, particularly in a PPP setting. In the same vein, because many researchers have understood the successful management of IORs to mainly mean a successful partnership, further research is needed to examine the links and the impact of the effective management of IORs on the effective management of the partnership itself. Moreover, there is a need to explore and examine the impact of the nature, process and details of the relationships between PPP partner managers, which this research has explored, for their management performance.
Further research is also needed to investigate the factors that can make or promote a PRE between partners. This study and previous research have attributed the positive partnership outcomes to quite different factors. Further research is needed to investigate these differences and explain if these three frameworks are indeed describing the same phenomenon. Additionally, there is a genuine need, for example, to explore those aspects that constitute or lead to creating a positive working environment. Knowledge into this important research area is extremely significant as it can provide PPP researches and managers with very useful insights into better understanding of these situations/factors that have potentially positive credentials to produce a more successful and effective PPPs.

In the IOC framework, further research is required to examine and validate the findings of this research to precisely identify the nature of the IOC in other PPP settings. Such hybridised culture with unique qualities, that is different from national or organisational cultural forms can also be further explored in other related theoretical frameworks (beyond PPPs) or other application contexts (internationally) to confirm its existence (or otherwise) and describe its nature and examine its impact. Additionally, there is a need for a valid and reliable typology of the characteristics of the IOC, particularly in a PPP setting, based on the findings of this study and research in other related contexts.

The management approaches that PPP managers adopted to minimise the negative impact of their cultural differences can possibly be usefully applied in other contexts (in theory and application) to assist partner managers in managing their IOC differences more effectively. For example, future research can be initiated to investigate the feasibility of applying these approaches to potentially assist in handling the cultural sensitivities that international companies can experience in the process of outsourcing internationally.

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45 In this research, PRE was based (among other factors) on equality, trust and commitment, mutuality in goals and a well-established project agreement. Similar to PRE, ‘synergetic behaviour’, suggested by Lasker, Weiss and Miller (2001) was a result of obtaining the positive side of determinants such as partner and partnership characteristics and the external environment. For Noble and Jones (2006), maintaining synergetic momentum (MSM) was a result of responding effectively to certain pressures and difficulties that boundary spanners confronted in managing their PPPs, such as (for example) the absence of clear structural and organisational authority lines and figures.
CONCLUSION

In concluding this study, four important points can be made. First, because PPP arrangements usually involve huge investments and they have been recently introduced by governments as an option to produce and deliver goods and services to the public, and there is little knowledge and experience in establishing and managing these types of hybridised projects, PPP policy makers, partners, managers and researchers have genuine concerns about the outcomes of these partnership arrangements. PPP researchers have particularly questioned the possibility of two partnering organisations with different institutional, organisational and cultural backgrounds working together and producing valuable results. The experience of the two case study organisations, however, has shown that despite all the above-mentioned difficulties, it was evident that these two partnership arrangements in Jordan have been effectively managed. The built-in safeguards that emerged during the implementation phase of the PPP projects limited the negative impact of the institutional differences between partnering organisations. The effective management practices and approaches that PPP managers adopted to manage their PPP organisations also greatly assisted them in handling the difficulties that they confronted during the course of the project. Moreover, the result of the content, context and nature of the IORs between partners created a more positive relationship environment (PRE). Further, the PRE and the approaches that PPP managers adopted to manage their inter-organisational culture (IOC) outweighed the cultural differences and limited their negative impact.

Second, the accumulated experience and knowledge about effectively establishing and managing PPPs is expected to assist organisations to have more successful PPP arrangements in the future. Consequently, PPPs will increase in their usage by governments internationally as an important alternative to the traditional procurement approaches. As such, it is anticipated that there will be a shift from more ‘conservative’ PPP modalities, such as build-operate-transfer (BOT) that involves the ownership of the facility being returned to the government at the contract expiration, to more ‘radical’ PPP arrangements such as build-own-operate (BOO) where the private sector owns the facility in perpetuity. The development of PPPs in this direction will be supported by the pressures exerted on governments to give the private sector an increased opportunity to contribute to social and economic development efforts.
Third, the experience of the case study organisations in this research has shown that effective management of a PPP project can make a difference to the partnership positive outcomes, despite concerns in extant research that bringing organisations with different organisational settings in a partnership arrangement is difficult to produce positive results. The QAIA is nearly in the final stage of the construction processes. The SWWTP has successfully completed construction and entered into the delivery stage during the period of data collection for this research. The details of how effectively managed have been these two Jordanian PPP infrastructure projects, has been provided in this thesis.

Finally, the qualitative approach employed in this research, resulted in detailed knowledge and deeper insights into the management of two PPP infrastructure projects in Jordan during the implementation phase of development. Nevertheless, as the findings of this research are limited to the Jordanian context, conducting further research on the management of the implementation phase of PPP projects is needed to in other international research domains to examine the impact of the context in which PPPs operate, on their performance effectiveness. This knowledge is an important requirement in exploring the components of what can be regarded as a model for a universal PPP theory, as suggested in this thesis.
REFERENCES


Appendix 1.1: Map of Jordan and its geographical location

**Appendix 1.2: Jordan: facts & figures (Geographic and demographic characteristics as of 2008)**

<table>
<thead>
<tr>
<th><strong>Jordan: Geography</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Asia, Middle East</td>
</tr>
<tr>
<td>Area</td>
<td>Total: 89,342 sq km (Water: 540 sq km. Land: 88,802 sq km)</td>
</tr>
<tr>
<td>Land boundaries</td>
<td>Syria to the north, Saudi Arabia to the south and south east, Iraq to the east, Israel and the Palestine National Authority to the west.</td>
</tr>
<tr>
<td>Climate</td>
<td>80% is classified as arid; Rainy season is October to May</td>
</tr>
<tr>
<td>Elevation extremes</td>
<td>Lowest point: Dead Sea 416m below sea level (lowest point on earth); Highest point: Mount Um Damî 1,854 m</td>
</tr>
<tr>
<td>Time Zone</td>
<td>GMT +2 (GMT + 3 from April to October)</td>
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<table>
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<tr>
<th><strong>Jordan: Demography (as of 2008)</strong></th>
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<tbody>
<tr>
<td>Total Population (000)</td>
<td>5,850 (Males 2.73 Million, Females 2.99 Million)</td>
</tr>
<tr>
<td>Age structure</td>
<td>Population less than 15 years of age (37.3%)</td>
</tr>
<tr>
<td></td>
<td>Population age 15-64 years of age (59.4%)</td>
</tr>
<tr>
<td></td>
<td>Population age 65 and above (3.3%)</td>
</tr>
<tr>
<td>Population growth rate</td>
<td>2.2%</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>Total population: 73 years (Male: 71.6 years; Female: 74.4 years)</td>
</tr>
<tr>
<td>Languages</td>
<td>Arabic (official), English (widely spoken)</td>
</tr>
<tr>
<td>Population Density</td>
<td>65.9 (person per km2)</td>
</tr>
<tr>
<td>Crude Birth Rate</td>
<td>29.1 (per 1000 Population)</td>
</tr>
<tr>
<td>Crude Death Rate</td>
<td>7.0 (per 1000 Population)</td>
</tr>
<tr>
<td>Population Doorbelling Time (Year)</td>
<td>31.6</td>
</tr>
<tr>
<td>Crude Divorces Rate</td>
<td>2.2 (Per 1000 Population)</td>
</tr>
</tbody>
</table>

### Appendix 1.3: Jordan: facts & figures (Selected economic indicators as of 2008)

<table>
<thead>
<tr>
<th>Economic Indicator</th>
<th>Value (as of 2007)</th>
<th>Conversion to USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Domestic Product- GDP (Current Prices)</td>
<td>15,057.5 million JD</td>
<td>US$ 21,080.1 million</td>
</tr>
<tr>
<td>Gross Domestic Product- GDP (Constant Prices)</td>
<td>9,362.6 million JD</td>
<td>US$ 13,108.2 million</td>
</tr>
<tr>
<td>GDP Growth Rate (Current Prices)</td>
<td>24.9 % (end of 2007)</td>
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<tr>
<td>GDP Growth Rate (Constant Prices)</td>
<td>7.9 % (end of 2007)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita (in Jordan Dinar- JD)</td>
<td>2,573.9</td>
<td>US$ 3,603.5 million</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>12.7 %</td>
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<tr>
<td>Inflation Rate</td>
<td>13.9 %</td>
<td></td>
</tr>
<tr>
<td>Foreign Reserves</td>
<td>4326 Million</td>
<td>US$ 6056 million</td>
</tr>
<tr>
<td>Exports (in Jordan Dinar- JD)</td>
<td>8,657 Million</td>
<td>US$ 12,119.8 million</td>
</tr>
<tr>
<td>Imports (in Jordan Dinar- JD)</td>
<td>13,559 Million</td>
<td>US$ 18,982.6 million</td>
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### Appendix 1.4: Jordan’s economic rankings (Doing Business Report, 2010: June 2008 to May 2009)

<table>
<thead>
<tr>
<th>Economy</th>
<th>Ease of Doing Business Rank</th>
<th>Starting a Business</th>
<th>Dealing with Construction Permits</th>
<th>Employing Workers</th>
<th>Registering Property</th>
<th>Getting Credit</th>
<th>Protecting Investors</th>
<th>Paying Taxes</th>
<th>Trading Across Borders</th>
<th>Enforcing Contracts</th>
<th>Closing a Business</th>
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<tr>
<td><strong>Selected worldwide</strong></td>
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W: Worldwide; M: MENA

Appendix 2.1: Terms used in establishing and managing PPP projects

A bidder. A respondent to a request for Expressions of interest or an invitation to submit a bid in response to a project brief. Typically, a bidder will be a consortium of parties with one lead party responsible for the provision of all contracted services on behalf of the consortium.

Build – Own – Maintain (BOM). This type of arrangement involves the private sector developer building, owning and maintaining a facility. The government leases the facility and operates it using public sector staff.

Build – Own – Operate - Transfer (BOOT). This type of arrangement involves a private sector developer financing, building, owning and operating a facility for a specified period. At the expiration of this period, the facility is returned to the government.

Build – Own – Operate (BOO). These projects operate similarly to BOOT projects, except that the private sector owns the facility in perpetuity. The developer may be subject to regulatory constraints of operation and, in some cases, pricing. The long term right to operate the facility provides the developer with significant incentive for the capital investment in the facility.

Build – Operate - Transfer (BOT). An agreement to design, finance, operate and maintain the facility by the concessionaire for the period of the concession. Legal ownership of the facility may or may not rest with the concession company (USAID Environment, February 26, 2007).

Bundling. This refers to the integration in a PPP of functions such as design, construction, financing, operations and maintenance of the facility, often in the form of a special purpose vehicle.

Business case. The business case provides an overview of the partnership approach, a preliminary view on how the project will be delivered, an analysis of the various impacts of the project, and an indication of the likely level of market interest, before significant resources are spent on its development.

Concession. The oldest form of PPP that involves a variety of arrangements that are based on the concept of a fixed-term concession, using various combinations of private sector resources to design, construct, finance, renovate, operate and maintain facilities. Ownership of the facility may remain with the government or be transferred to it after the completion of the construction phase or at the end of the concession period (AL SAMRA wastewater treatment plant Website, 2009).

Default. The failure of a party to perform a contractual requirement or obligation, including failure to meet deadlines, to perform to a specified standard, to meet loan repayment or to meet its obligations in relation to a materialized risk.

Design, Build, Finance (DBF). A form of PPP that involves the procurement of an asset using private finance, without private sector operation and provision of associated services.

46 Adopted from the work of Grimsey and Lewis (2004b), except where noted otherwise.
Design, Build, Finance and Operate (DBFO). A form of PPP in which the service provider is responsible for the design, construction, financing and operation of an asset. Operation refers to the provision of some or all of the services related to the asset’s use.

Design, Build, Operate (DBO). A PPP arrangement, in which the public sector provides finance for a capital investment project but the providers of the project retain the design and construction, and delivers some or all of the operational elements.

Expression of Interest Invitation. The offer submitted by the investor on the basis of an Invitation for Expression of Interest (Jordan Privatisation Law, Number 80 of 2000).

Joint Venture (JV). A distinct legal form of PPP arrangement involving public and private bodies assuming some form of equity stake in a PPP.

Key performance indicators (KPIs). Are measures developed under a performance management regime to indicate how well specified performance targets are being realised.

Lease – Develop – Operate (LDO). This type of project involves a private developer being given a long-term lease to operate and expand an existing facility. The private developer agrees to invest in facility improvements and can recover the investment plus a reasonable return over the term of the lease.

Middle East and North African (MENA). Group of 13 countries including: Algeria, Bahrain, Egypt, Iraq, Jordan, Kingdom of Saudi Arabia, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Syria, The Palestinian Authority, Tunisia, United Arab Emirates, and Yemen.

Operation and Maintenance Contract (O&M). These projects involve the private sector operating a publicly-owned facility under contract with government.

Optimism bias. The demonstrated systematic tendency for appraisers to be over-optimistic about key project parameters, including capital costs, operational costs, works duration and benefits delivery.

Output specification. Sets out the range of services that government is seeking to procure and performance levels required for each of these services.

Pre-qualification. Validation of the availability of the necessary requirements in the investors pursuant to those required under the Invitation for Expression of Interest (Jordan Privatisation Law, Number 80 of 2000).

Private party. The private sector entity with which the government contracts in a PPP. Traditionally the private party has been a special purpose vehicle under contract to a public body.

Probity. Uprightness, honesty, proper and ethical conduct and propriety in dealings. Used by government to mean ‘good process’.
**Procurement.** The component of the commissioning process that deals specifically with purchasing a service from a provider.

**Public interest test.** An assessment of the impact of the project on effectiveness, accountability and transparency, affected individuals and communities, equity, consumer rights, public access, security and privacy.

**Public Private Partnership (PPP).** Is a long-term collaborative and well-defined and structured relationship between one or more public, private and any/or other organisation where resources are comparatively injected into the partnership, benefits, opportunities and rewards are satisfactorily allocated and risks, responsibilities and decisions are relatively shared among partners to achieve their mutually agreed upon goals.

**PPP Transaction Studies.** Studies conducted to assess the feasibility of the PPP transaction and include elements such as: the social, economic and environmental impact of the implementation of the project; preliminary analysis of the investment risks; requirements of the project in relation to funding, managerial and technical expertise; financial pre-feasibility study; legal requirements of the project; and, conditions that are to be met by the investor (Jordan Privatisation Law, Number 80 of 2000).

**Public sector comparator (PSC).** A hypothetical constructed benchmark to assess the value-for-money for conventionally financed procurement in comparison with a privately financed scheme for delivery a publicly funded service.

**Risk allocation.** The allocation of responsibility for dealing with consequences of each risk to one of the parties to the contract, or agreeing to deal with the risk through a specified mechanism which may involve sharing the risk.

**Special purpose vehicle (SPV).** An organisation that can be established as a distinct legal entity to bring together the companies involved in a PPP in order to manage the project and share the risks and rewards.

**Traditional Design and Construction (TD&C).** The government prepares a brief setting out project requirements before inviting tenders for the design and construction of the project. Private sector contractors undertake to design the project in accordance with the brief, and construct it for an agreed sum, which may be fixed or subject to escalation.

**Unitary payment.** Payment for services delivered by an SPV under a PPP arrangement.

**Value-for-money.** The optimum combination of whole-of-life cycle cost, risks, completion time and quality in order to meet public requirements.
### Appendix 2.2: Analysis of the problems faced by the Sydney Cross City Tunnel (CCT) project during the design and the implementation phases of the project development

<table>
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<tr>
<th>The Problem</th>
<th>Examples</th>
<th>Consequence (s)</th>
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<tbody>
<tr>
<td>• Lack of transparency to the public</td>
<td>- Details of the CCT contract were not publically disclosed.</td>
<td>- Created a great controversy which was played out in public and the media.</td>
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<td>- Matters relating to ‘several other aspects’ of the contract: the up-front payment and the right-to-operate fees.</td>
<td>- Considered inappropriate by a range of stakeholders.</td>
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<td>- CCT agreed to cover the costs for the construction remediation in exchange for permission to charge higher tolls. This contractual amendment was not made public.</td>
<td>- Considered inappropriate by a range of stakeholders: public and media. - Permission obtained to charge higher tolls</td>
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<td>• Problems left unresolved</td>
<td>- Partners in dispute for weeks, then for a year.</td>
<td>- Problems became chronic. Remedial actions were too late.</td>
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<td>• Differences in the project’s original design to the new design</td>
<td>- Tunnel was ‘non-conforming’ with the government’s initial technical specifications.</td>
<td>- The new proposal had a longer length and a higher permitted speed limit.</td>
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<td>- The need for additional AU$75 million in facility remediation and AU$35 million worth of additional construction.</td>
<td>- CCT agreed to cover these costs in exchange for permission to charge higher tolls.</td>
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<td>- Setting higher service rates to the users. The cost of the tolls the CCT had set was above the level the public was prepared to pay (was proposed as AU$2.65).</td>
<td>- Increased to AU$3.65 per trip.</td>
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<td>- Being over-optimistic (overestimation). CCT projected the tunnel would be patronised by 90,000 users (in 2006), raising to 100,000 vehicles (in 2016).</td>
<td>- Patronage remained low. In its first year of operation, the tunnel carried only 25,000 vehicles per day which increased to 30,000 in 2006. This represented one third of the forecasted number of users.</td>
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<td>- Limited service alternatives to users. Limited alternative surface routes.</td>
<td>- Angry citizen reaction.</td>
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<td>- Little attention to developing the area close to the project. There was little potential for property development in the eastern portion of the metropolitan area.</td>
<td>- Angry citizen reaction.</td>
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<tr>
<td>• Serious concerns about health and safety practices</td>
<td>- An employee was killed during the construction.</td>
<td>- Angry citizen reaction which was played out in the media.</td>
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<tr>
<td>• Changes in the government office employees</td>
<td>- Most of the governmental employees, including the main government negotiator, were either dismissed or resigned.</td>
<td>- Lack of communication between parties resulted in deterioration in partners relationships.</td>
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<td>• Unilateral action by one partner</td>
<td>- Road changes were later reversed by the government against the contract terms. The new state government dropped the toll rates and reversed some of the road closures.</td>
<td>- This action is now subject to a legal claim. - CCT criticised these actions as politically expedient, violating the terms of the partnership agreement.</td>
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</table>

Source: Developed for the current research, based on Johnston (2010); Johnston and Gudergan (2007); and Siemiatycki (2010)
Appendix 3.1: Research methods, paradigms and strategies in qualitative research

Source: Adapted for the current study from Denzin & Lincoln (1998), pp. xi-32.
Dissertation Title: Managing Public Private Partnership (PPP) infrastructure projects in Jordan

Research team: Ali Mistarihi and Dr. Geoffrey Carter, Department of Management, Griffith Business School, Griffith University- Gold Coast Campus. Contact Ali Mistarihi at +914 (07) 07555 29273 or a.mistarihi@griffith.edu.au.

This research is a component of Mr. Ali Mistarihi’s PhD academic program. The objective of this study is to explore the management approaches used to manage partnered, hybridised and networked types of organisations. Also, to provide an insight into the management approaches used to manage the problematic issues facing PPPs during their implementation phase.

You are not required to participate in this research if you do not wish to do so and you can withdraw from the study at any time without the need to explain your reasons for withdrawing. No loss will occur as a result of your withdrawal and no penalty will be incurred. All responses are confidential, and results will only be published in aggregate and for research. The interview will be audio-taped and only the research team will have access to this tape. Additionally, the audiotape will be erased following transcription.

<I have read this consent form. I agree to participate in this study and give my consent freely. I realise that whether or not I decide to participate is my decision and will not affect me. I also realise that I can withdraw from the study at any time and that I do not have to give any reasons for withdrawing. I have had all questions answered to my satisfaction>.

Signature:

.................................................................................................................
(Participant)  (Date)

.................................................................................................................
(Investigator) (Date)

I would like to receive a copy of a summary of the results for this study (Please tick one)

Yes ☐ No ☐

If responding “Yes” to the above, please state your address or e-mail:

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Appendix 3.2: Consent Form
### Appendix 3.3: Coding system for interviewees

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Appendix 3.4: Information Sheet

Information Sheet

Contact

Senior investigator
Dr. Geoffrey Carter
Lecturer in Management
Griffith Business School
Department of Management
Griffith University Gold Coast Campus
PMB 50 Gold Coast Mail Centre
Queensland 9726
Australia

Student investigator
Ali Mistarihi
PhD candidate in Management
Griffith Business School
Department of Management
Griffith University Gold Coast Campus
PMB 50 Gold Coast Mail Centre
Queensland 9726
Australia

Phone: 07555 18760
Email: g.carter@griffith.edu.au

Phone: 07555 29273
Email: a.mistarihi@griffith.edu.au

Research Title

Managing Public Private Partnership (PPP) infrastructure projects in Jordan.

Purpose of the research

This research is a component of Mr. Ali Mistarihi’s PhD academic program. The objective of this study is to explore the management approaches used to manage partnered, hybridised and networked types of organisations. Also, to provide an insight into the management approaches used to manage the problematic issues facing PPPs during their implementation phase.

Duration of participants’ involvement

Participation in this research will involve taking part in a face-to-face interview of 40 to 50 minutes duration. Your participation is completely voluntary and you may decline to participate at any time without any commitment. You can refuse to answer any question or stop the interview at any time. Withdrawing from the interview will not result in any negative consequences for you. Moreover, your participation poses no risks to you as the research asks only that you identify your perceptions of managing the implementation phase of a PPP project.

Confidentiality of the data

The interview will be audio-recorded and only the research team will have access to this record. The audiotapes will be erased following transcription and analysis. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information, consult the
University’s privacy plan at [www.griffith.edu.au/ua/aa/vc/pp](http://www.griffith.edu.au/ua/aa/vc/pp) or telephone +614(07) 3875 5585.

**Questions or concerns**

If you have any queries regarding this research, do not hesitate to contact the researchers listed above. For any concerns or complaints in relation to the ethical conduct of the project, you can contact the manager of Research Ethics at Griffith University Human Resource Ethics Committee on +614(07) 3735 5585 or via [research-ethics@griffith.edu.au](mailto:research-ethics@griffith.edu.au)

**Feedback**

Once the report about this research has been completed, a brief summary of the findings will be made available upon request by contacting the researchers at the Department of Management. It is also possible that the results will be presented at academic conferences, and published in journals or books, but your name will not be identified in these publications.

**Thanks for your participation in this study**
Appendix 3.5: Letter to study informants

Dear Mr./Ms./Mrs Abc Xyz

(Job Title)

E-mail: abc@xyz.com.jo

I thank you for giving me the opportunity to discuss about the nature of the research I am currently undertaking as an important component to complete the requirements of my Doctoral Degree from Griffith University on Gold Coast, Australia.

Further to our initial (telephone call/email/meeting), I am kindly requesting to arrange to conduct an interview with you, at the time and place you suggest. I hereby assure you that the information you will give is confidential and will only be used for the purposes of the research I am undertaking. Also, the information collected will not be disclosed to a third party without your consent and your anonymity will at all times be safeguarded.

Participation in this research will involve taking part in a face-to-face interview of 40 to 50 minutes duration. Your participation is completely voluntary and poses no risks to you as the research asks only that you express your perception of “how well managed is the implementation phase of a PPP project” that you (are/have been) involved in.

The interview will be audio-recorded and only the research team will have access to this recording. The audiotapes will be erased following transcription and analysis.

Please refer to the information sheet or me if you have any queries regarding this research.

I thank you once again for your cooperation, understanding and for being prepared to help, and hope to meet with you in the nearest future.

Yours Sincerely
Appendix 3.6: Interview questions (English version)

**PPP Management Framework**

1. Can you give me some examples of the effective management practices (methods, techniques, etc) that you have applied and which proved successful?
2. What are the issues you found that are the most problematic in PPP management and/or implementation?
3. Are there any differences between partners in terms of aims, strategies, language, decision making? If yes, then, to what extent? How are these managed?
4. Do any other problematic issues exist between partners? If any, what are these? How are these addressed and resolved?
5. What sets of skills and kind of expertise do you think are necessary for managing PPP projects?
6. What monitoring techniques and controlling mechanisms are you using to oversee the progress of the PPP project?

**Inter-organisational Relationships (IORs) Framework**

7. How do you interact with other partners (i.e. the pattern, content and frequency)?
8. Are there any constraints that might limit this interaction (i.e. the context of the interaction)? If so, what are they?
9. How do you keep productive, ongoing relationships with your partners?
10. How do you manage difficulties in relationships with other partners (assuming that these occur from time to time)?
11. What skills are necessary for managing relationships with other partners?

**Inter-organisational Culture (IOC) Framework**

12. Do any cultural gaps exist between partners (i.e. difference in language, trust, power, values, norms, ways of doing things)? If so, what are they?
13. How are cultural gaps between partners (i.e. differences in language, trust, power, values, norms, ways of doing things) managed?
14. Is the culture in managing PPPs a different type of culture? If yes, then, what are the characteristics of this culture (i.e. how do you describe this type of culture)? Have you been involved in any cultural training before the commencement of this project?
Appendix 3.7: Interview questions (Arabic version)

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