Converging and Diverging Governance Mechanisms: the Dynamic Interplay of (Dys)function

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Abstract

This paper explores governance mechanisms and the dynamic interplay of functional and dysfunctional behaviour, what we term ‘(dys)function’, in long-term inter-organizational relationships. Using two longitudinal cases of warship commissioning we argue although varying degrees of formalization is important when managing long-term relationships, organizations should learn not only to contract or build up trusting relations but consider both together as semi-coupled in terms of the impact such interplay has on performance. We discuss governance mechanisms as moving beyond notions of complementarity and substitution towards a more nuanced view where governance of inter-organizational relationships can be convergent or divergent. Our findings show that what is functional behaviour for one side of the dyad can be dysfunctional for the other party, also that relationships can exhibit functions and dysfunctions across forms of governance simultaneously. Our conclusions suggest that mismatches in governance mechanisms can be positive as well as negative, and it is the overall relationship atmosphere that determines the direction of the (dys)function. In building a context dependent understanding of governance we both summarise the (dys)functions associated with formal and informal governance mechanisms, and explore their impact on relationship exchange performance over time.

Keywords: Inter-organizational relationships, governance, contracts, trust, longitudinal research.
1. Introduction

The performance of inter-organizational relationships is, in part, a consequence of the effective coordination of exchange governance mechanisms (e.g. Poppo and Zenger, 2002; Argyres and Mayer, 2007; Faems et al., 2008; Guérard et al., 2013; Cao and Lumineau, 2015) over time. More specifically, questions arise over how the interplay between contractual and relational governance mechanisms and organizational behaviours affect inter-organizational alliances, partnerships and network arrangements (Williamson, 1996; Dyer and Singh, 1998; Möllering, 2005). Although the comparative functionality of formal and informal governance mechanisms has been extensively documented, their dynamic interplay (Zheng et al., 2008; Cao and Lumineau 2015) and, critically, their relative (dys) functionality over time, remains less well understood. Moreover, in line with calls for a more ‘context-dependent understanding’ of governance, there is a need for greater exploration of exchange governance in complex and uncertain operating environments (Filochev and Nakajima, 2010, p. 593). The UK defense sector for example spends £7.5bn annually on support contracts which are prone to delay and budget overspend because of shifting customer requirements and public-private integration issues (Haynes, 2012; Sherman, 2013; Jones et al., 2014), with one instance leading to catastrophic failure (Haddon-Cave, 2009).

Consequently, this paper analyses a series of extended inter-organizational relationships, enacted by the Ministry of Defense (MoD) and its partnering organizations during the commissioning and support of UK naval ships from 1990 to 2010. It explores how governance mechanisms interact over extended periods of time and, more specifically, the relative functionality and dysfunctionality of formal and informal governance mechanisms (Poppo and Zenger, 2002; Cao and Lumineau, 2015) at different points in the exchange lifecycle. Thus, we answer the call by Cao and Lumineau (2015, p. 4) who argue that ‘existing literature needs a more rigorous distinction between the debate of how contractual and relational governance interact and the debate of the relationships of contractual and relational governance and performance’. We conduct a longitudinal study following two inter-organizational relationships in the defense sector which span nearly 20 years (Langley, 1999; Pettigrew, 1990). Based on
rich primary and secondary datasets including 40 interviews with senior managers, our paper offers a rare longitudinal and dyadic perspective of governance mechanisms interplay, extending prior studies conducted at one point in time and presented from one organization’s perspective. The investigation suggests that, rather than thinking of these forms of governance as either complements or substitutes, they can be understood as semi-coupled, with multiple functional-dysfunctional switches throughout the lifecycle.

The paper is organised as follows: the conceptual background explores formal and informal governance mechanisms, their functional and dysfunctional performance implications and reflects on their dynamic interplay. Our methods are described in terms of research approach, data collection and analysis. The fieldwork presents two cases of inter-organizational relationships followed by discussion. The paper concludes with theoretical and practical implications, limitations, and avenues for future research.

2. Conceptual Background

Previous studies have distinguished between two types of governance mechanisms: formal or contractual, and informal or relational.

*Formal approaches*, typified by legal contracts set up with very specific terms and clauses in order to avoid conflicts of interpretation (Luo, 2002), can foster greater efficiency and reduce costs by clarifying activities between contracting parties and by mitigating potential opportunism (Nooteboom, 1996; Zaheer and Harris, 2006). As it is practically impossible to foresee every possible future contingency, effective contracting also includes clear principles and procedures on how to best manage potential future contingencies (Stipanowich, 1998). This in turn relies on high degrees of programmability of tasks and behaviours and the measurability of outcomes *ex-ante* (Das and Teng, 2001). With specific reference to the complexity and uncertainty of long-term relationships, partnering organisations are effectively unable to decompose tasks and procedures for all possible future contingencies (Gulati and Singh, 1998), hence leaving potential gaps in the contract. Contract incompleteness can also stem from
bounded knowledge of contracting parties and cost constraints in drafting contractual governance (Blumberg, 2001; Poppo and Zenger, 2002).

Informal approaches are derived from - and reinforce - trust, commitment and social capital between partnering organizations (Bachmann and Inkpen, 2011; Child and Möllering, 2003) acting as behavioural guidelines that enforce social obligation during the exchange (Heide, 1994; Cannon et al., 2000). Here, future contingencies are addressed by flexibility and increased information sharing procedures between partnering organizations (Zaheer and Harris, 2006). Relational governance mechanisms often rely on partnering organisations having “greater levels of confidence in the predictability of each other’s actions” (Gulati and Singh, 1998: 790). However, establishing and nurturing relational governance mechanisms in long-term inter-organizational relationships can be time and cost-consuming (Bachmann, 2001; Larson, 1992).

2.1 Function and Dysfunction in Governance Mechanisms

In general terms all governance mechanisms can have a range of positive ‘functionalities’; from safeguarding interests, clarifying roles and responsibilities and multi-party coordination, to adaptation, learning and sense-making. Equally however, governance mechanisms can have a range of negative ‘dysfunctionalities’ that act as potential impediments to exchange performance and the overall inter-organizational relationship. For example, even the most well-intentioned formal control efforts can be derailed by exploitation (arising from weaknesses such as incomplete contract design or intellectual property rights: Williamson, 1975; 1996) or coordination failure (Malhotra and Lumineau, 2011), particularly when uncertainty, complexity, and transaction duration increases (Ring and Van de Ven, 1994). Prior studies highlight the negative effect of incomplete contracts, leading to conflicts and disagreements between partnering organizations when interpreting the contract (e.g. Bernheim and Whinston, 1998; Baiman and Rajan, 2002). Likewise, contractual governance mechanisms may lead to more ‘cumbersome, overregulated, and impersonal processes’ (Beck and Kieser, 2003, p. 794) that, in turn, may hinder creativity and flexibility because of over-regulated and prescriptive procedures (Lusch
and Brown, 1996; Weber and Mayer, 2011). Similarly, informal governance mechanisms can create their own dysfunctions; from ‘cognitive lock-in’ and relational inertia (potentially causing organizations to honour obligations which may conflict with the pursuit of self-interest and risk avoidance: Gulati, 1995; Leenders and Gabbay, 1999). Other studies draw out the potential loss of objectivity, sub-optimal information search and poor decision making, leading to missed market opportunities such as new technology innovations (Uzzi, 1997; Grayson and Ambler, 1999; Anderson and Jap, 2005). Table 1 provides an overview of identified function and dysfunction in governance mechanisms.

< Insert ‘Table 1’ about here >

2.2 The Dynamic Interplay of Governance Mechanisms

The relationship between these different types of governance mechanism (Cao and Lumineau, 2015) is more contested. Some authors argue that contractual and relational governance mechanisms act as substitutes (e.g. Cavusgil et al., 2004; Gulati, 1995; Sitkin and Roth, 1993); contracts obviate the need for setting up and maintaining social relationships whereas, conversely, trusting relationships facilitate governance without the costs and complexity associated with contracts (Adler, 2001; Ring and Van de Ven, 1994), while others present evidence to suggest the complementary nature of formal/informal governance mechanisms (e.g. Das and Teng, 2001; Luo 2002; Poppo and Zenger, 2002; Klein et al., 2005; Zheng et al., 2008; Cao and Lumineau, 2015). Bachmann (2001) for example, suggests that lengthy contract negotiations and detailed contracts are not necessarily a signal of distrust. Clearly defined contracting may actually support the development of long-term, trusting relationships by narrowing ‘the domain and severity of risk to which an exchange is exposed and thereby encourage cooperation and trust’ (Poppo and Zenger, 2002, p. 708). Moreover, relationship continuity and ongoing cooperation may be vital in addressing contractual gaps. As Möllering (2005, p. 291) concludes, trust and control do not merely co-exist, but enter a ‘reflexive relationship to each other when they form the basis of positive
expectations’. It is important to note that, although such observations are clearly anchored in a processual view of governance, a full discussion of the interplay of governance mechanisms (and their relative (dys)functions) over time goes beyond simple discussions of whether formal and informal mechanisms act as substitutes or complements. To date few studies have fully investigated the dynamic characteristics of this interplay and its consequences for exchange performance. Most studies of governance and exchange performance have considered individual governance mechanisms (e.g. Vanneste and Puranam 2010). Important exceptions include Faems et al., 2008) and Dimitratos et al., (2009) who studied the incentives and performance monitoring schemes adopted by small-medium Greek firms seeking to collaborate with international partners. They identified distinct patterns of governance ‘mix’ and suggested that combinations of formal and informal cooperation were associated with improved performance outcomes. This dualistic view is supported by Luo’s (2002, p. 903) examination of joint ventures in dynamic markets, arguing that the use of contracts and building cooperation are ‘not substitutes but complements in relation to...performance’.

To understand the dynamics of governance interplay, different types of mechanism and their relative (dys)function must be identified and their impact on the relationship – encompassing, at the very least, dyadic perspectives on performativity and function – assessed over time (e.g. early, mid, late phase). Figure 1 provides a simple illustration of governance interplay where the starting point is a functional relational and contractual relationship between two organizations (‘w’) which then deteriorates. The shift from function to dysfunction can be represented as one of three alternatives, either: functional relational and dysfunctional contractual governance (‘x’), or dysfunctional contractual and relational governance (‘y’), or dysfunctional relational and functional contractual governance (‘z’).

< Insert ‘Figure 1’ about here >

Figure 1 suggests that long-term relationships will display elements of both formal and informal governance, and that these will vary over time. Our paper therefore seeks to go beyond notions of
complements and substitutes towards an understanding of their functions and dysfunctions across relationship lifecycles, thus offering a more fine-grained analysis of inter-organisational relationship governance. Specifically, we address the following research question: How do functions and dysfunctions of governance mechanisms shift over relationship lifecycles and what is the impact for performance?

3. Methodology

To grasp the temporal complexity of governance mechanisms interplay between functions, dysfunctions and performance, a longitudinal multiple case study approach was adopted (Langley, 1999; Berends et al., 2011; Canato et al., 2013). Multiple case study methods were chosen as appropriate for examining poorly understood phenomena (Yin, 1994) and where research is used to probe deeply into processes by collecting data of complex, ambiguous, real-time and retrospective interpretations of events and organizational contexts (Langley, 1999; Drori and Honig, 2013). The purpose of our case studies is not to depict the frequency of occurrence of a specific phenomenon, but to highlight cases of theoretical and practical importance (Stuart et al., 2002).

3.1 Research approach, setting and case selection

The research setting for our study is the Royal Navy. We examine long-term inter-organizational relationships that are designed to deliver performance outcomes. Specifically, we undertook a chronological study of all major classes of warship platform before selecting two relationships for further examination. Our sampling logic follows Pettigrew’s (1990) suggestion to select polar types, resulting in the platforms for a small patrol ship and large warship being selected for investigation. The patrol ship was generally regarded as a successful public-private sector venture in terms of achieving a high performance outcome by delivering a high number of days (i.e. >300) per year that each ship was available to go sea, the larger warship project was not viewed as successful, delivering only around half the expected days.
Each relationship was investigated during the commissioning process (i.e. design, build, launch, and sea trials) and ongoing maintenance and support of Royal Navy warships. These relationships include processes, activities and actions unfolding over time and to include key events such as the transition from conventional and publically owned assets, to an efficiency focussed and part-privatised operation. The cases are linked in that they both follow the introduction of new procurement policy in the UK defence sector termed Contracting for Availability which focuses on performance outcomes such as sea-going availability and through-life ship support capability, as opposed to previous wisdom based on supplier responsibility ending at delivery of the vessel or platform (MoD, 2005). Crucially we study the same private organization, anonymised here as the ‘contractor’ for confidentiality, in both cases which presents a unique opportunity to observe and compare the interplay of governance (dys)function and performance implications over time.

In this paper performance is measured in two ways: first is the more conventional outcome-orientated nature of performance, such as the number of days per year a vessel spends at sea over the time spent harbour-side undergoing maintenance. Second, and crucial in any study of contractual and relational governance mechanisms, is the exchange performance between two collaborating organizations. Exchange performance is the sum effect of formal contractual and informal relational mechanisms on a dyadic relationship such where factors such as trust may be introduced by one or other partner as a means of enhancing exchange performance (Gulati and Nickerson, 2008) and ultimately improving the delivery of a shared goal or objective.

3.2 Data collection and analysis

Fieldwork involved 40 interviews between 60 to 120 minutes duration (see Table 2, Appendix), with key stakeholders including naval personnel (e.g. Captain, Commander) and civilian contractors, ranging from senior managers (e.g. Managing Director, Chief Engineer) to technical specialists (e.g. Support Manager, Engineer). We ensured diversity of interviewees from partnering organisations who had knowledge of the relationships under analysis, different organisational hierarchy levels and across the relationship’s history,
following recommendations by Berends et al., (2011). The findings narrative was also supported by rich data from our 5 site visits and a myriad of secondary data (e.g. Nott, 1981; SDR, 1998; Croft et al., 2001; MoD, 2005; 2006; 2007; NAO, 2011; Rankin, 2013; Jones et al., 2014). This helped to address validity and reliability problems and to overcome the bias introduced by any respondents’ memory lapse or distortion (Eisenhardt and Graebner, 2007). A typical interview commenced with questions regarding the interviewee and organizational background. Interviewees were asked to talk about platform capabilities, performance, coordination, contractual arrangements, trusting relationships and the defence environment.

Data collection and analysis activities were conducted in parallel, based on how well the data fitted existing, modified or emerging understanding and its relevance to the observed phenomenon (Miles and Huberman, 1994). The authors used open, axial and selective coding strategies and summarized and displayed data in an iterative fashion. As a first line of coding, we deployed an open coding approach, analysing our rich datasets line by line and identifying key categories of interest which were, for instance, contracts, trust, performance, functions and dysfunctions. As a second step, we deployed axial coding, aiming to build relationships between categories (Strauss, 1987). Following this, we deployed a selective coding strategy focusing on key codes driving our analysis and sense-making processes. Our coding framework, including broader codes such as case organization background information and more specific codes on the concepts under study such as different functions and dysfunctions for both governance mechanisms, emerged from the conceptual review and the interview process.

The findings are structured following an issue-organised analytical chronology (Berends et al., 2011). This approach to presenting longitudinal data facilitated the analysis of the dynamics, relationships of functions, dysfunctions, governance mechanisms and performance over time, resulting in a clearer overall relationship development story. Detailed stories were constructed from the fine-grained data we collected to achieve high accuracy and to go beyond surface description to elicit the generative mechanisms behind their progression (Van de Ven, 2007).
4. Presentation of findings

In this section we present our two cases of defense sector inter-organizational relationships. In terms of background, successive defence reviews and procurement initiatives in the UK over the past 30 years suggest a rising awareness of the need for naval ships and their support organizations to improve performance of frontline services whilst mitigating costs (Nott, 1981; SDR, 1998; Croft et al., 2001; MoD, 2005). The introduction of new ideas for support in maritime defense such as through-life capability meant a shift from private contractor responsibilities ending after construction, towards “much more intrusive relationships” involving the MoD buying full service capability (MoD Procurement Director, 2006). The move to transform relationships towards smarter, more efficient working practices began in the early 1990s, with the MoD seeking to engage more closely with industry and spreading the cost and risk of new equipment programmes (Sanderson, 2009).


Our first case examines the functions and dysfunctions of governance mechanisms across all phases during the commissioning of a new patrol ship built for the MoD by the contractor. The contractor is a large British multinational security and aerospace company seeking to expand its portfolio into maritime defense. The case provides an early illustration of contracting for logistical support as public policy shifted from arms-length working practices towards a more collaborative, integrative approach with the private sector, termed contracting for availability or CFA.

*Early phase (1997-1999)*

In the late 1990’s the MoD had five ageing coastal patrol ships providing a low level of service availability. All were difficult and expensive to maintain yet the ministry could not get approval from the government for their replacement. During a private dinner in 1997 between the public Director of Shipping and a senior executive from the contractor, it was revealed by the shipbuilder that it had a “hole in its order book” and wanted to replace the current ships (Contractor Manager, 2006). The contractor was
also eager to get involved in maintenance and repair activities to expand the business: “we wanted to get into support.” The contractor saw great potential for development of its maritime logistical support capability, proposing that three new vessels could do the work of the original five by increasing sea-time availability, with a further incentive of leasing the new ships to the MoD thereby saving any upfront payment.

The functional aspects of contractual governance are represented by the clear aims of the MoD who wanted more responsibility for service support to be devolved to private industry. There was recognition by senior policymakers that a “significant move must be made to make warships cheaper” (RN Commander, 2009). The CFA initiative originated from government civil servants who were inspired by the Defence Industrial Strategy white paper to leverage more private sector capability (MoD, 2005). Responsibility for providing warship support services such as stores, engineering training and IT systems was to be given to industry. A transformation model was conceived as an aid for contractors, which started with traditional support and progressively involved greater responsibility (e.g. holding spare parts), towards contracting for capability as the highest level. Although collaboration on the new patrol ship required a fully binding contract prepared by marine lawyers, increasing emphasis was being placed on partnering principles with industry (MoD, 2005). The proposed public-private working agreement meant the MoD engaged with the contractor on a ‘no blame and no surprises’ policy. This new approach used performance-based payments with key indicators to gauge service levels and encourage continuous improvement.

Relations between the ministry and contractor were initially mutually explorative and aspirational. CFA was intended by the MoD as an opportunity to remove bureaucracy in its organization, free up resources and improve communications with industry. The contractor reciprocated by recognising the MoD’s predicament as “having no money” and proposing a radical solution to provide new ships with “no colossal outlay” (Contractor Manager, 2006). Using a novel leasing concept agreement was reached for
the provision of a complete package that included design, construction and long-term support of the vessel.

*Mid phase (1999-2003)*

Dysfunctional behaviour in the relationship began to emerge in 1999 with the MoD insisting on putting the patrol ship contract out to tender: “*we didn’t want one systems integrator dominating*” (MoD, Snr Manager, 2006). This apparent reversal away from the proposed new practices effectively delayed the programme by several years, which in turn “*burnt a bit of the relationship*” (Contractor Manager, 2006). Decisions in the past made by the MoD over procurement of naval equipment on ships had lacked innovation by focusing on price, and meant the ministry had developed a reputation for short-termism. The old coastal patrol ships still in service were now having a detrimental effect on new repair practices, because the contractor felt they were cheap and had been “*procured with no thought as to how [they were] to be maintained in the future*” (MoD Commander, 2009).

The commissioning process of the new patrol ship after it was finally built in 2001 was a complex combination of contractual control and watershed events. It led to the MoD’s new department of Defense Equipment & Supply adopting more integrative and less rigidly defined working patterns. “*We transferred significant risk to the supplier. I can see no other way than CFA of realising this level of capability...you can cut away whole chunks of bureaucracy*” (MoD Manager, 2009). Yet several dysfunctional aspects of relational governance emerged from the relationship as the contract began to be implemented. One issue stemmed from deep-rooted beliefs based on past experience by the contractor that the MoD’s procurement process was fundamentally bureaucratic. A legacy of conservatism towards contracting existed in the tiers of the public organization, which meant some senior defence personnel lacked a sense of vision or innovation. The response by one government minister to the lease style contracts was that it was “*novel and contentious*” (Contractor Manager, 2006). Further, the adoption of new CFA working practices did not fully resolve historic poor design and defective construction issues on earlier vessels. Even when the patrol ships were commissioned, the cost implications of holding expensive inventory items such as
engines was passed on by the MoD to the contractor. Hence the first year of operations under the new CFA support contract was “very painful...with arguments” (Contractor Support Manager, 2011, *ibid*). Engineers from the contractor were trying to expedite outstanding defects on the ship with copies of the contract fastened to their clipboards. The logic of partnering had not been sufficiently defined in the agreement, resulting in the initial operating period being “a nightmare”. Conflicting understanding over CFA implementation was creating intense and difficult interactions between the two organizations. Such dysfunctional behaviour emerged because of the tendering delays and deeply held belief by contractor personnel based on past experience of working with the MoD.

*Late phase (2003-2005)*

As the new patrol ship entered its second year of operation under CFA, more formal roles and responsibilities became defined in an internal policy document. The creation of an integrated project team was also introduced by the MoD as an attempt to bring all relevant public and private sector stakeholders together to manage projects more effectively “from cradle to grave” (Moore and Antill, 2001, p. 179). The CFA policy described the behaviour expected from both organisations during their participation on the project (e.g. ‘no surprises’) and to maximise teamwork. The MoD decided to increase the emphasis on partnering principles to improve the CFA commissioning and support process. Appropriate behaviour from all personnel on the team was now being presented in terms of supporting “*mutual benefit, openness and trust, exchange of information and ongoing innovation*” (MoD, 2005). During this later phase, when the team came up against obstacles, they tried to develop a standard procedure alongside the contract through “...*trial it, learn the lessons, and record it by introducing it into the contract*” (Contractor Support Manager, 2011, *ibid*). By working together, they used the contract as a means to frame problems, such as the development of revised metrics. Over time the challenge of supporting the patrol ship became one of “*putting the contract to one side*”. Whilst recognising an agreement had to be reached between the two organizations, trying to adhere too closely to the contract was obstructive for the contractor seeking to deliver on metrics defined exclusively by the new availability-based working practices.
Learning new ways of working resulted in a further 18 months required for the contractor’s engineers to stop old habits such as expediting, and put the contract aside while consulting with the team. Yet at times contractor personnel could “see no other way” to transfer risk from the MoD to the private sector (Contractor Manager, 2009), suggesting limited awareness over how to explore other opportunities to create alternative options. Although the adoption of leasing heralded the start of more flexible working between the public and private organization, CFA did not suit the older ships already in service, particularly those with obsolescent or faulty equipment requiring constant attention. Given that CFA yielded high levels (i.e. 95%) of sea-time availability for the patrol ship, both the MoD and contractor considered the new method of working together to be successful.

Case 1 summary

The early relationship phase of the patrol ship can be summarised as mutually explorative and aspirational with the contractor providing considerable input to engage with the MoD to secure a new type of contract (Table 3). Yet attempts to implement the contract during the mid-phase results in intense and often conflicting interactions as the contractor tries to work around MoD bureaucracy and delay caused by the insistence on tendering. The late phase sees a renegotiation in the relationship and changes in the way the contract is applied, with freer information exchange and clearer definition of responsibilities between the two organizations. In terms of governance (dys)function interplay, exchange performance during all phases of the relationship coincides with the combinations of (dys)function observed over time (Table 3). For example, high exchange performance in the early phase is associated with functional contractual and relational behaviour which is matched in both organizations, whereas low exchange performance in the mid phase is associated with a combination of both functional and dysfunctional behaviour. While this may seem intuitive, it is interesting to note the almost simultaneous switching from function to dysfunction between phases, and the combinations of matching or opposing behaviour patterns between the MoD and contractor. The recovery of the relationship in the late phase, where functional relational behaviour and contractual behaviour is matched in both organizations (Table 3), is significant because it
contrasts markedly with the next case. Here the same contractor embarks on a similar programme, but involving a significantly larger design of vessel.

< Insert ‘Table 3’ about here >

4.2 Case 2: Large warship (2003 – 2011)

This case illustrates the relationship phases during first large warship of its type to be built for several decades in the UK. Almost five times the size of the patrol ship and equipped with the latest electronic ship safety, navigation and missile guidance systems, first steel was cut in 2003. The proposed construction and support mechanism was “a very bold initiative” that adopted the new policy of Contractor Logistics Support (CLS), based on CFA but where the contractor takes full control over all on-board systems (Commander RN, 2009). The contractor won the contract to design and build the new warship primarily on the basis of its past performance with the patrol ship.

Early phase (2003-2006)

The plan by the MoD was to incentivise the contractor to design and build a class of vessel that was cost effective in supporting through-life maintenance over long periods (i.e. 3-5 years) using an integrated support solution. Despite concerns by some senior MoD personnel who did not want one firm “dominating”, the same contractor was again selected to lead the warship’s development (MoD Senior Manager, 2006). This addition to the MoD’s growing list of capital programmes represented “another go at in-service support” and on a significantly larger scale than anything previously attempted (MoD Commander, 2009). The challenge was to reform existing structures and policy mechanisms for sharing tasks between the public and private sector, and collectively to identify personnel to create an integrated project team. The adoption of CLS helped steer long-term support objectives with the contractor being encouraged to develop costs and programme milestones.
The approach now adopted by the MoD was to outsource logistical support to private contractors, with fewer yet higher value contracts being awarded as part of a new policy of prime contracting. Admiralty naval headquarters agreed to the idea of a private contractor defining its own costs despite being “nervous...that such an innovative support solution might not be able to deliver 24/7 support especially in a conflict zone” (Contractor Support Manager, 2011). When the first warship was nearly complete, the MoD controversially tried to withdraw the support contract, effectively reneging on an initial agreement because of escalating costs during construction. However, the contractor argued successfully that given the level of investment by both organizations, it should retain the contract and deliver the ship’s support as planned. Despite a period of contractual uncertainty, the early phase of the warship is characterised by ambitious and bold plans for a privately led support programme, meaning the contractor had to deliver core elements of the ship’s infrastructure e.g. hull, superstructure, weapons management and navigation technology. This practice was heralded at the time as resulting in “closer relationships with both the MoD and subcontractors” (Contractor Snr Manager, 2012, ibid). Adopting more responsibility over the extended life of the warship meant the contractor increasingly saw itself as brokering relationships with specialist suppliers and encouraging learning through high levels of interaction where “relationships are key.” The reality of the situation materialised somewhat differently however, as described below.

**Mid phase (2006-2009)**

When the true scale of the task facing the warship CLS team became apparent, formal coordination mechanisms (i.e. the contract) were relaxed by the MoD and a more flexible approach was adopted towards the contractor. Skills had to be learned from first principle in order to achieve any progress with integrating the warship’s new systems: “the support team should have started with a larger pool of people” (Contractor Support Manager, 2011). During initial sea trials, further difficulties began to emerge over quoting for the vessel’s support costs for a year, much less the 3-5 year period as originally specified. Expected seagoing performance was not being met by the new warship, due in part to the high levels
achieved by the patrol ship. The sheer size and complexity of the warship was a major factor in the difficulties over predicting logistical support requirements, despite a decade of the MoD encouraging smarter acquisition and supplier partnerships (Moore and Antill, 2001). Furthermore, although heavily involved in other types of military support, the contractor had no cross-over mechanisms for sharing experience between other relevant sea, land or air force support teams. During the now extended trial period, the contractor’s engineers on the warship began to understand there were “no shortcuts...we had to apply a lot more rigor with people tweaking systems for 6-12 months until [they] reached maturity” (Contractor Support Manager, 2011).

The engineers responsible for delivering core elements of the support programme realised there was “a massive load of learning” needed to complete the contract. Management began to understand the importance of “more planning for big platforms...more strategic, less tactical thinking” (Contractor Snr Manager, 2012, ibid). It was felt that public sector structures were to blame where “everything the MoD does is vertically driven...by department or platform.” Despite concerns over rising costs and delays, the relationship was sufficiently established for the two organizations to negotiate and agree on the contractor retaining full control of the support contract. The difficulties were now alarmingly apparent yet a level of understanding remained between the MoD and contractor, as indicated by the comments of one manager describing the steps being taken to try to resolve a dispute during the now protracted development period: “the contract is there, but if we run to it all the time that’s failure” (Contractor Manager, 2006).

Late phase (2009-2011)

The warship was by now semi-operational and capable of going to sea for short periods, although it was falling further behind in the commissioning process of on-board systems, with available days at sea running at only 50 per cent. The contractor was forced to apply a corrective action approach rather than planned procedures. Managers were surprised at the shortness of the allotted ship systems trial periods originally provided by the MoD. The original vision of the warship as a model for platform based through-life support failed because “it was too hard to define the requirement sufficiently such that it could be
contracted against” (Contractor Support Manager, 2011). Dysfunctional aspects in the relationship began to re-emerge, despite agreement from the MoD for the contractor to continue with the programme. There was also indecision on the part of other public departments such as Fleet headquarters on the level of responsibility that could be granted to the contractor. This in turn reinforced the view of the contractor of the vertically-driven nature of the MoD, and the sense of a cumbersome and overregulated public sector. In one example, the MoD’s policy on preferred sovereignty status of UK manufactured equipment became increasingly impractical because of the legacy of industrial decline. Increased dependence on overseas suppliers meant the warship was prone to further delays, meaning the original planning was inadequate.

The late phase of the warship was characterised by poor performance and increasingly entrenched positions from both organizations. Despite participation in several high value defense contracts and numerous initiatives on collaborative partnerships, the contractor was inconsistent in terms of how it worked with other suppliers. Although official policy emphasised mutual benefits, the contractor’s approach to specialist suppliers remained short-term and transactional, where “sub-contractors don’t get paid...if they don’t deliver!” (Contractor Manager, 2010, *ibid*). The contractor had also become suspicious of public sector methods of administration: “MoD procurement is always simplistic and over-arching”. The new style of performance-based support contracts required more scope for customization by the project team than was actually provided for by the MoD. Yet the MoD’s view was to “get private firms to be more flexible and manage their supplier’s core capabilities...a core element of this is turning engineers into programme managers” (MoD Senior Manager, 2006). One manager at the contractor admitted that where private firms were expected to lead, further learning and development was required: “we’re behind the curve in procurement capability” (Contractor Support Manager, 2011).

Case 2 summary

The relationship between the MoD and contractor during the early phase of the new warship starts as an ambitious and bold collaboration seeking to build on earlier successes (Table 4). Yet by the mid-phase the contractor realises it has misjudged the level of complexity and resources required. In the late phase the
programme falls further behind schedule, exchange performance falls between the two organizations, with a culture of blame developing over the expectations not being met. In terms of governance (dys)function interplay and impact on exchange performance, the contractor and MoD in the warship case demonstrate instances of opposing contractual and relational dysfunctional behaviour. In the early phase, matching functional governance mechanisms give way to relational dysfunction caused by the MoD almost reneging on the agreement (Table 4). This is initially tolerated in the relationship with no effect on exchange performance. Yet in the mid phase, a combination of functional and dysfunctional behaviour begins to emerge: the MoD relaxes its approach in response to the developing situation over underestimation in the support contract, but the contractor questions public sector policy (Table 4). Seen as medium exchange performance, the mid phase represents a pivotal point in the relationship, comprising of opposing functional and dysfunctional views over workability of the contract and the importance of maintaining constructive managerial relations. As the case reaches its late phase, the relationship fails to recover, with an unrealistic contract hampering development and dysfunctional relational behaviour emerging from both organizations, leading to low exchange performance.

5. Discussion

In this section we first explore how functions and dysfunctions of governance mechanisms shift over relationship lifecycles, and then examine the implications for impact on exchange performance.

5.1 Dynamic interplay of governance mechanism functions and dysfunctions

By entertaining functions and dysfunctions across complex relationship lifecycles, we move beyond notions of complements and substitutes towards a more nuanced view of governance of inter-organizational relationships. As shown in Tables 3 and 4, governance can be convergent, such as that in the early phase of the patrol ship, or divergent, such as that in the mid phase of the warship. In other words, what is functional for one side of the dyad can be dysfunctional for the other party (and vice-
versa). We also note that relationships can exhibit functions and dysfunctions across forms of governance simultaneously. For example, in the mid phase of the patrol ship, the MoD created a situation where their contractual governance is functional, but their relational governance is dysfunctional.

In our conceptual background we underlined the view that extant studies do not offer a coherent picture of the relationship between governance mechanisms (Cao and Lumineau, 2015). Some authors argue that contractual and relational governance mechanisms are substitutes (Sitkin and Roth, 1993; Gulati, 1995; Gulati and Nickerson 2008) where contracts and control replace the need for setting up and maintaining social relationships, others support the complementary nature of governance mechanisms (Das and Teng, 2001) where relationship continuity and ongoing cooperation support formal procedures and drive contractual refinements. Our case studies suggest that neither of these labels are conducive to a more nuanced understanding of inter-organizational relationship governance. Firstly, the two forms of governance are not substitutive as we find evidence of both across all stages of the relationship lifecycle. Secondly, the two forms are not complementary at all times as this would suggest that their combination together is uniformly positive. In fact, our findings show that the combinations can be negative, as dysfunctions in one form of governance can lead to dysfunctions in the other. Moreover, their relationship can be temporarily decoupled whereby one party might have functional contractual governance and dysfunctional relational governance within the same time period. We therefore suggest that the two forms of governance might be better described as ‘semi-coupled’. Our cases demonstrate that both formal and relational governance are required within inter-organizational relationships (thus supporting prior studies; e.g. Poppo and Zenger, 2002; Cao and Lumineau, 2015), but that their (dys)functions and direction might change over time, which so far has attracted very limited conceptual and empirical attention in prior literature.

Our approach also views the role of function and dysfunction in terms of their collective interplay (Lui et al., 2009; Lumineau and Henderson, 2012), and as such commensurate to the potential effect of governance mechanisms over time. While the formalization of functional contractual control and trustful
relations are well recorded in governance literature (e.g. Berends et al., 2001; Dyer and Chu, 2003), we observed specific instances of formal and informal dysfunction in our cases between the two organizations. Examples of formal dysfunctional behaviour include the MoD’s limited awareness (Uzzi, 1997) or lack of planning over the impact of transferring risk to the private sector, and senior personnel missing the market opportunity (Granovetter, 1985) of working on the new contract. Informal dysfunctional behaviour is demonstrated by the contractor in terms of a tendency towards ingrained habits and cognitive lock-in (Gulati, 1995), as reflected in the unsubstantiated belief that the buyer might revert to more short-term cost-based working structures. Formal dysfunction also includes the inability to coordinate a task due to contract incompleteness (Macneil 1980), such as the contractor’s view that “it was too hard to define the requirement”. Other informal dysfunctions emerge through not honouring obligations to others (Uzzi, 1997; Gulati, 1995) i.e. “sub-contractors don’t get paid if they don’t deliver” which the contractor would not have accepted as appropriate behaviour towards itself. As an interesting example of unintended consequences, formal mechanisms put in place by the MoD to enable the relationship (e.g. defined roles, procedures, procurement policy), ultimately worked against it because they were considered “too cumbersome” by the contractor (Beck and Kieser, 2003). Although considered here as stand-alone examples, we suggest they are incorporated into the dynamic interplay of functional and dysfunctional behaviour, and conducted together with governance mechanisms as part of an in-depth approach to inter-organizational relationship based longitudinal research.

5.2 Impact on exchange performance over time

Adopting a systematic approach to governance mechanism (dys)function interplay enables more informed discussions around the nature of the impact on exchange performance, particularly the identification of behaviour which may reduce inter-organizational conflict (Gulati and Nickerson, 2008). Our study reveals not only outcomes in terms of exchange performance (i.e. low, medium, high), but more critically the causes of change in performance through combinations of (dys)functional contractual and relational based behaviours during each phase of the relationship. Hence a richer, more engaging narrative (Weick, 1995)
can be woven around participant organizations to capture events as they unfold in time, and aided by our function-dysfunction matrix which provides for a more structured, game theoretic approach to the study of governance (Jones et al., 1997).

Using this approach we identify matching and opposing combinations of governance dysfunctions, similar to the dialectic perspective of Vlaar et al., (2007) or meta analytic investigation by Cao and Lumineau (2015), revealing an interesting twist in the interpretation of our findings. Generally, the received wisdom where both organizations do not agree on the governance mechanisms to use is a decline in performance. However, our conclusions drawn from the notion of governance (dys)function are less delineated in terms of impact on exchange performance. Both our cases start with initially matching functional relational and contractual behaviour, but then suffer a decline in performance exchange during their mid phase. Yet this decline is not determined directly by whether each organization’s governance mechanisms (dys)function match or oppose the other, but by the cumulative effect on the relationship as a whole. For example, looking at Table 3 one organization appears to trigger the decline in performance through putting the contract out to tender, with further misunderstandings leading to a scenario where both organizations seem to agree that a common vision is lacking despite low exchange performance. Similarly, in Table 4 exchange performance also starts to decline but this time the organizations occupy opposite corners of the matrix: with one relaxing its stance in response to a contractual estimation problem, the other is more accepting of the contract but becomes increasingly wary of public sector administrative methods. In both cases, despite different governance mechanism profiles, exchange performance reaches a critical point where, for recovery to occur, a renegotiation is required between both organizations in terms of contract conditions and the nature of the relationship.

Adopting a longitudinal, three phase (i.e. early, mid, late) perspective means our findings also provide evidence of the factors involved in inter-organizational relationship recovery during complex programmes. Comparing the two cases, recovery was achieved where formal and informal governance mechanisms were considered together, for instance through more defined team member roles, freer
exchange of information, framing problem-solving through use of the contract, and shared development of new processes. We argue that relationships can withstand and even benefit from some degree of dysfunctional behaviour, illustrated by the MoD nearly reneging on its agreement on the warship support contract, although the impact of dysfunction over the longer term ultimately leads to a terminal decline in exchange performance.

6. Conclusion

This paper conceptually and empirically explores the roles of governance mechanisms and the dynamic interplay of functions and dysfunctions over time in complex inter-organizational relationships (Guérard et al., 2013; Cao and Lumineau., 2015). We argue although varying degrees of formalization is important when managing long-term relationships, organizations should learn not only to contract or build up trusting relations but consider both together as semi-coupled in terms of the impact such interplay has on exchange performance. The received wisdom is where both organizations do not agree on the governance mechanisms to use, the result is a negative impact. However, our conclusions suggest that mismatches can be positive as well as negative, and it is the overall relationship atmosphere that determines the direction of the (dys)functions. In building a context dependent understanding of governance, we both summarise the (dys)functions associated with formal and informal governance mechanisms, and explore their impact on relationship exchange performance over time.

The practical implications for managing contracts are also raised here. Cost-cutting is often cited as the reason that complex contracts are outsourced and public organizations rely more on private suppliers to deliver outcome-based support solutions (Sherman, 2013; Jones et al., 2014). Such thinking shifts the challenge of long-term relationships and associated skills development squarely onto the shoulders of contractors. This increasing dependency on the private sector and the potential for negotiation begs questions around the enforcement of contracts, learning and relationship recovery in an increasingly limited market of skilled organizations. In order to maintain exchange performance in long-term inter-
organizational relationships therefore, we argue managers must learn not just how to engineer solutions but identify pathways through the dynamic interplay of governance (dys)functions.

In terms of limitations, our study focuses on two inter-organisational relationships over time to offer a more fine-grained perspective on governance interplay. Further research should explore the impact of the wider network on the focal inter-organizational relationship and governance mechanisms interplay. For instance, how do external agents such as government or NGOs influence the interplay of governance mechanisms? And, are certain functions or dysfunctions emphasised by the wider stakeholder network? Moreover, while these long-term relationships provided an ideal setting for investigating key concepts such as governance over time, further research should investigate (dys)functions and the interplay in short-term relationships on an inter-personal and team level. Finally, our constructs around governance, exchange performance and dysfunction would benefit from further research exploring different institutional contexts including other sectors and emerging economies, where contracts and trust may play a different role and assume different functions.

References


Figure 1. Illustration of governance interplay over time
<table>
<thead>
<tr>
<th>Governance Mechanism</th>
<th>Intended Function</th>
<th>Potential Dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Coordination &amp; control</em></td>
<td><strong>Deterministic</strong></td>
</tr>
<tr>
<td></td>
<td>Decomposition of tasks and alignment of activities to reduce impact of individual biases and judgement errors (Gulati and Singh, 1998; Klein Woolthius et al., 2005).</td>
<td>Inhibiting creativity, flexibility and innovation Due to overregulation and prescribing process in detail (Ring and Van der Ven, 1994; Mintzberg, 1994; Nooteboom, 1999; Volberda, 1998).</td>
</tr>
<tr>
<td></td>
<td>Intended to mitigate negative behaviour and opportunism (Carson et al., 2006; Lui, 2009; Möllering, 2005)</td>
<td>Unilateral dependence, hold-up problems, conflict and disagreement due to incomplete/inaccurate contracts (MacNeil, 1980; Anderson and Decker, 2005).</td>
</tr>
<tr>
<td></td>
<td>Clarification of roles and responsibilities (Lui, 2009).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Planning</em></td>
<td><strong>Overregulation</strong></td>
</tr>
<tr>
<td></td>
<td><em>Codification &amp; sense-making</em></td>
<td><strong>Conflict</strong></td>
</tr>
<tr>
<td></td>
<td>Offers codification of behaviour; leads to degrees of certainty and stability; focus attention and reflection upon issues (Klein Woolthius et al., 2005; Das and Teng, 2001).</td>
<td>Can lead to conflict where processes and procedures are incomplete/inaccurate (Luo, 2002; Malhotra and Lumineau, 2011).</td>
</tr>
<tr>
<td><strong>Informal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Communication &amp; Information Sharing</em></td>
<td><strong>Suboptimal search</strong></td>
</tr>
<tr>
<td></td>
<td>Generates and maintains social interaction (Bachmann, 2001; Das and Teng, 2001; Dyer and Singh, 1998; Gulati, 1995).</td>
<td>Limited awareness of market developments or opportunities from quality of information used in decision (Locke, 1999; Grover et al., 2006).</td>
</tr>
<tr>
<td></td>
<td><em>Reduction of formal control costs</em></td>
<td><strong>Binding</strong></td>
</tr>
<tr>
<td></td>
<td>Lubricant of economic exchange’ and coordination mechanism (Dyer and Chu, 2003; Inkpen and Curral, 2004; Knights et al., 2001; Schepker et al., 2014).</td>
<td>(‘Cognitive lock-in’; ‘relational inertia’) Can lead to honouring obligations that may conflict with the pursuit of self-interest; risk avoidance (Uzzi, 1997; Gulati, 1995; Poppo et al., 2008).</td>
</tr>
<tr>
<td></td>
<td><em>Reduction of uncertainty</em></td>
<td><strong>Blinding</strong></td>
</tr>
<tr>
<td></td>
<td>Increases the perceived predictability of social actors’ future behaviour (Luhman, 1979; Nooteboom, 2002).</td>
<td>(‘Loss of objectivity’) can lead to missed market opportunities (e.g. new innovations) by focussing on too narrow a set of criteria (Anderson and Jap, 2005; Granovetter, 1985; Villena et al., 2011).</td>
</tr>
</tbody>
</table>
Table 2, Appendix: Research interviews (2005-2012)

<table>
<thead>
<tr>
<th>No.</th>
<th>Interviewee position or rank</th>
<th>Organization</th>
<th>Month / Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Senior advisor to MoD</td>
<td>DERA</td>
<td>05.05</td>
</tr>
<tr>
<td>2</td>
<td>Commander, Flight training</td>
<td>Royal Navy</td>
<td>06.05</td>
</tr>
<tr>
<td>3</td>
<td>Commander, Administration</td>
<td>Royal Navy</td>
<td>06.05</td>
</tr>
<tr>
<td>4</td>
<td>Lieutenant, Procurement</td>
<td>Royal Air Force</td>
<td>07.05</td>
</tr>
<tr>
<td>5</td>
<td>Senior staff officer (Retired)</td>
<td>Royal Navy</td>
<td>10.05</td>
</tr>
<tr>
<td>6</td>
<td>Executive director</td>
<td>DPA</td>
<td>11.05</td>
</tr>
<tr>
<td>7</td>
<td>Communications</td>
<td>DLO</td>
<td>12.05</td>
</tr>
<tr>
<td>8</td>
<td>Director, Supply chain</td>
<td>Contractor</td>
<td>03.06</td>
</tr>
<tr>
<td>9</td>
<td>Chief Engineer</td>
<td>Contractor</td>
<td>04.06</td>
</tr>
<tr>
<td>10</td>
<td>Chief Engineer</td>
<td>Contractor</td>
<td>04.06</td>
</tr>
<tr>
<td>11</td>
<td>Manager</td>
<td>Contractor</td>
<td>05.06</td>
</tr>
<tr>
<td>12</td>
<td>Director</td>
<td>DPA</td>
<td>05.06</td>
</tr>
<tr>
<td>13</td>
<td>Director</td>
<td>Contractor</td>
<td>05.06</td>
</tr>
<tr>
<td>14</td>
<td>Director (Retired)</td>
<td>Contractor</td>
<td>06.06</td>
</tr>
<tr>
<td>15</td>
<td>Director, Logistics</td>
<td>DLO</td>
<td>06.06</td>
</tr>
<tr>
<td>16</td>
<td>Project Manager</td>
<td>Contractor</td>
<td>06.06</td>
</tr>
<tr>
<td>17</td>
<td>Director</td>
<td>Contractor</td>
<td>06.06</td>
</tr>
<tr>
<td>18</td>
<td>Senior Manager</td>
<td>DPA</td>
<td>06.06</td>
</tr>
<tr>
<td>19</td>
<td>Consultant</td>
<td>Contractor</td>
<td>03.07</td>
</tr>
<tr>
<td>20</td>
<td>Managing Director</td>
<td>Defence association</td>
<td>11.07</td>
</tr>
<tr>
<td>21</td>
<td>Business Development Manager</td>
<td>Contractor</td>
<td>07.08</td>
</tr>
<tr>
<td>22</td>
<td>Business Director, Aerospace</td>
<td>Contractor</td>
<td>08.08</td>
</tr>
<tr>
<td>23</td>
<td>Director</td>
<td>Contractor</td>
<td>10.08</td>
</tr>
<tr>
<td>24</td>
<td>Defence Research</td>
<td>RUSI</td>
<td>01.09</td>
</tr>
<tr>
<td>25</td>
<td>Captain</td>
<td>MoD / Royal Navy</td>
<td>02.09</td>
</tr>
<tr>
<td>26</td>
<td>Technical Director</td>
<td>Contractor</td>
<td>04.09</td>
</tr>
<tr>
<td>27</td>
<td>Commander</td>
<td>MoD / Royal Navy</td>
<td>05.09</td>
</tr>
<tr>
<td>28</td>
<td>Turbine Group Leader</td>
<td>MoD</td>
<td>07.09</td>
</tr>
<tr>
<td>29</td>
<td>Ship Support Director</td>
<td>MoD</td>
<td>07.09</td>
</tr>
<tr>
<td>30</td>
<td>Managing Director</td>
<td>Contractor</td>
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</tr>
<tr>
<td>31</td>
<td>Manager</td>
<td>MoD</td>
<td>12.09</td>
</tr>
<tr>
<td>32</td>
<td>Chief Executive</td>
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</tr>
<tr>
<td>33</td>
<td>Manager</td>
<td>Contractor</td>
<td>02.10</td>
</tr>
<tr>
<td>34</td>
<td>Admiral</td>
<td>Royal Navy</td>
<td>02.10</td>
</tr>
<tr>
<td>35</td>
<td>Procurement / Design</td>
<td>Contractor</td>
<td>01.11</td>
</tr>
<tr>
<td>36</td>
<td>Submarine Support</td>
<td>Contractor</td>
<td>04.11</td>
</tr>
<tr>
<td>37</td>
<td>Support Manager</td>
<td>Contractor</td>
<td>11.11</td>
</tr>
<tr>
<td>38</td>
<td>Senior Manager</td>
<td>DE&amp;S</td>
<td>03.12</td>
</tr>
<tr>
<td>39</td>
<td>Assistant Director Procurement (Rtd)</td>
<td>DPA / DE&amp;S</td>
<td>04.12</td>
</tr>
<tr>
<td>40</td>
<td>Senior Manager Ship support</td>
<td>DE&amp;S</td>
<td>04.12</td>
</tr>
</tbody>
</table>

Key to abbreviations:

MoD Ministry of Defence
RUSI Royal United Services Institute
DERA Defence Evaluation & Research Agency
DPA Defence Procurement Agency
DLO Defence Logistics Agency
DE&S Defence Equipment and Supply
Table 3 Patrol ship governance (dys)functions over the relationship lifecycle

<table>
<thead>
<tr>
<th>Early phase</th>
<th>Mid phase</th>
<th>Late phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relational Function</strong></td>
<td><strong>Relational Function</strong></td>
<td><strong>Relational Function</strong></td>
</tr>
<tr>
<td><strong>Dysfunction</strong></td>
<td><strong>Dysfunction</strong></td>
<td><strong>Dysfunction</strong></td>
</tr>
<tr>
<td><strong>Contractual</strong></td>
<td><strong>Contractual</strong></td>
<td><strong>Contractual</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MoD Evidence</th>
<th>MoD Evidence</th>
<th>MoD Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual Governance: <strong>Functional</strong></td>
<td>Contractual Governance: <strong>Functional</strong></td>
<td>Contractual Governance: <strong>Functional</strong></td>
</tr>
<tr>
<td>- Preparation of a fully binding contract</td>
<td>- Adopts standard MoD practice of putting contract out to tender in the market</td>
<td>- Roles &amp; responsibilities formally defined in internal policy document</td>
</tr>
<tr>
<td>- Performance-based payments proposed</td>
<td>- Focus on price reduction</td>
<td>- Contract used to frame problems</td>
</tr>
<tr>
<td>- Devolution of risk</td>
<td>- Relational Governance: <strong>Dysfunctional</strong></td>
<td>- Relational Governance: <strong>Functional</strong></td>
</tr>
<tr>
<td>- Emphasis on partnering principles</td>
<td>- Tendering puts relationship on hold</td>
<td>- Creation of an integrated project team</td>
</tr>
<tr>
<td>- ‘No blame, no surprises’ approach</td>
<td>- Apparent reversal away from proposed new working practices</td>
<td>- Increased emphasis on partnering</td>
</tr>
<tr>
<td>- Creation of a transformation model</td>
<td>-</td>
<td>- Definition of appropriate behaviour</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contractor Evidence</th>
<th>Contractor Evidence</th>
<th>Contractor Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual Governance: <strong>Functional</strong></td>
<td>Contractual Governance: <strong>Dysfunctional</strong></td>
<td>Contractual Governance: <strong>Functional</strong></td>
</tr>
<tr>
<td>- Proposal for a novel ship leasing concept</td>
<td>- Cost implications of inventory from new contract passed to contractor</td>
<td>- Co-development of standard procedures during ship trials alongside contract</td>
</tr>
<tr>
<td>- Provision of a complete support package</td>
<td>- Contract initially used for expediting</td>
<td>- Acceptance of revised metrics</td>
</tr>
<tr>
<td>- No initial outlay for the customer</td>
<td>- Relational Governance: <strong>Dysfunctional</strong></td>
<td>- Relational Governance: <strong>Functional</strong></td>
</tr>
<tr>
<td>- Recognised the MoD’s perspective</td>
<td>- Belief that MoD is bureaucratic</td>
<td>- New working practices required the unlearning of old habits</td>
</tr>
<tr>
<td>- Exploited a business opportunity out of an informal social exchange (i.e. dinner)</td>
<td>- Partnering logic not sufficiently defined</td>
<td>- Recognition of need for trust &amp; openness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alignment: Convergent</th>
<th>Alignment: Divergent</th>
<th>Alignment: Convergent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance: <strong>High</strong></td>
<td>Performance: <strong>Low</strong></td>
<td>Performance: <strong>High</strong></td>
</tr>
<tr>
<td>Evidence: Mutually explorative and aspirational relations</td>
<td>Evidence: Delay to the project of several years Intense and conflicting interaction</td>
<td>Evidence: Achievement of 95% ship sea-time availability Responsibilities and behaviour clearly defined</td>
</tr>
</tbody>
</table>
Table 4 Warship governance (dys)functions over the relationship lifecycle

<table>
<thead>
<tr>
<th>Early phase</th>
<th>Mid phase</th>
<th>Late phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relational Function</strong></td>
<td><strong>Relational Function</strong></td>
<td><strong>Relational Function</strong></td>
</tr>
<tr>
<td>Dysfunctional</td>
<td>Dysfunctional</td>
<td>Dysfunctional</td>
</tr>
<tr>
<td>Contractual</td>
<td>Contractual</td>
<td>Contractual</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MoD Evidence</th>
<th>Contractor Evidence</th>
<th>MoD Evidence</th>
</tr>
</thead>
</table>
| Contractual Governance: Functional  
- Bold initiative to outsource system control  
- New policy of ‘prime contracting’  
- Contractor selected on past performance | Contractual Governance: Functional  
- WINS ambitious design and build contract with in-service support contract to follow  
- Plans to reform existing structures | Contractual Governance: Dysfunctional  
- Indecision on the level of responsibility which can be given to contractor  
- Outdated policy on UK parts procurement |
| Relational Governance: Dysfunctional  
- Concerns by senior staff that such an innovative solution might not deliver  
- Attempt to withdraw the support contract | Relational Governance: Functional  
- Formal coordination mechanisms relaxed  
- Adoption of more flexible approach when difficulties began to emerge | Relational Governance: Dysfunctional  
- Poor project performance means MoD adopts an entrenched position  
- Claims contractor needs more managers |
| Contractor Evidence | Contractor Evidence | Contractor Evidence |
| Contractual Governance: Functional  
- Agrees to take on greater responsibility  
- Sees itself as brokering relationships and encouraging learning in the supply chain | Contractual Governance: Functional  
- Recognition of the role of planning and rigorous testing until product maturity  
- Support contract retained despite issues | Contractual Governance: Dysfunctional  
- On-board system commissioning process continues to fall behind schedule  
- Corrective action rather than planned |
| Relational Governance: Functional | Relational Governance: Dysfunctional  
- Suspicion emerges for public sector methods of administration  
- No cross-over learning mechanisms | Relational Governance: Dysfunctional  
- Poor treatment of specialist suppliers  
- MoD seen as cumbersome and MoD procurement as simplistic |
| **Alignment:** Divergent | **Alignment:** Divergent | **Alignment:** Convergent |
| Performance: High - medium  
Evidence: An ambitious and bold collaboration  
Early concerns: attempt to withdraw contract | Performance: Medium  
Evidence: Rising costs and delays to the project  
Some understanding and cooperation remain | Performance: Low  
Evidence: Achieves only 50% ship sea-time availability  
Expectations of performance are not met |