

Public Sector Contracting

Wendy van der Valk

Abstract

This chapter zooms in on contracting in a public sector context. The relationship and exchange between public buyers and suppliers are usually governed by formal contracts as well as by more relational mechanisms such as trust. This chapter explains that contract design choices and characteristics of the relationship together shape how contracts are subsequently implemented and managed, and hence the success of the ongoing exchange. It discusses considerations for contract design and subsequent management in light of relationship characteristics and its effects. Specific topics in this chapter include contract specification, remuneration and incentive schemes, and how learning from deviations and noncompliance may foster post-formation adjustments to contractual governance.

Keywords

Contractual governance · Relational governance · Supplier behavior · Contract specification · Rewards · Incentives · Contract implementation · Learning

W. van der Valk (🖂)

7

Tilburg School of Economics and Management, Tilburg University, Tilburg, Netherlands e-mail: w.vdrvalk@tilburguniversity.edu

Learning Objectives

After studying this chapter, the reader will be able to:

- Describe different types of contracts.
- Explain how contracts can drive supplier behavior.
- Explain which contract types are most appropriate/effective for a given transaction.
- Understand that contracts always coexist with the relational characteristics that typify the buyer-supplier relationship being governed.
- Understand how contract implementation can be a source of learning and improved contract (re)design.

7.1 Introduction

Contracting involves the systematic and efficient creation, implementation, and management of contracts for the purposes of maximizing operational and financial performance and reducing risks. It thus refers to the ex-ante (e.g., in advance of contract signing) contract creation process in which public and private buyers arrive at a signed agreement regarding the conditions and characteristics of the proposed delivery of works, supplies, or services with specific suppliers.

Contracting also refers to the implementation and ex-post (e.g., after contract signing) management of the contract to execute the delivery and possible (re)use of the agreed works, supplies, or services. During contract implementation, various delivery aspects such as quality and cost need to be monitored and suppliers need to be paid. The basis for these monitoring and payment processes has been designed into the contract, such as monitoring and rewarding efforts and behaviors versus performance and outcomes.

Finally, contracting refers to analyzing any deviations that may occur so that they can properly be addressed, both in the short term (e.g., recovery of damage) and the long term (e.g., learning about the causes of deviations and how they could be prevented in the future). In some cases, recovery may not be possible, requiring organizations to develop alternative solutions that accommodate users, but potentially also to take more formal (e.g., legal) steps toward suppliers. Therefore, managing the supplier relationship after the contract has been signed is an important activity in the perform phase of the public procurement process. In brief: the contract lays down the foundations of a relationship between buyers and suppliers and is key in the purchase phase of the public procurement process.

In Section 7.2, contract design choices and implications for the subsequent implementation and management of the contract are discussed, focusing on the type and level of detail of contract specifications and on the remuneration schemes that are put in place. These choices are imperative for effective management of the

ongoing exchange process and the successful realization of the buyer's objectives. Next, in Section 7.3 the ex-post management of contracts is described, whereby attention is given to inter-organizational network structures, such as triads, that may arise in public sector contracting. In Section 7.4 contract design and contract management are addressed in terms of relational elements of buyer-supplier relationships, such as trust. Finally, attention is drawn to contract deviations and how they may be used for the purposes of learning and effective contract adjustments and redesign in Section 7.5.

7.2 Contract Specification

Contracts have traditionally been viewed as formal written documents that capture the agreements made between a public principal and one or more parties that deliver works, supplies, or services, thereby marking the end of the purchase phase in the public procurement process. While formal agreements may take various forms (written or verbal, implicit or explicit), formal contracts specifically refer to written agreements that are legally binding (Atiyah, 1989; Klein Woolthuis et al., 2005) and that typically entail obligations to perform particular actions (McNeil, 1978). In line with this notion, contracts include 'third-party enforcing' agreements such as legal courts, as well as formal self-enforcing agreements, such as arrangements regarding penalties and bonuses (Dyer & Singh, 1998). The term 'contractual governance' is used to indicate to what degree the relationship between the public buyer and suppliers is indeed governed by a formal contract (Ferguson et al., 2005; Gardet & Mothe, 2011). Extant work on contractual governance entails a strong body of knowledge in ex-ante contract design (Roehrich et al., 2021) and a growing body of knowledge in ex-post use of contracts (see Section 7.4).

In contract design, two key elements can be identified: (1) the specification and (2) the reward structure (see Section 7.3). Together, these two elements determine the nature and framing of the contract. Specific examples include lump sum and fixed price contracts, fixed price plus incentive fee contracts, cost-reimbursable contracts, unit rate contracts, and agreements with price adjustments (Table 7.1). The design of the contract also impacts the amount of risk transferred toward suppliers. Many organizations and industries draw on standard contracts with boilerplate terms (Roehrich et al., 2021), which are then customized. This variation in contracts has led to many classifications of contracts drawing on a variety of dimensions (Cao & Lumineau, 2015), such as 'simple' versus 'complex' contracts (Petersen & Ostergaard, 2018; Praxmarer-Carus, 2014), 'standardized' versus 'customized' contracts (Van der Hurk & Verhoest, 2016), or 'time and materials' versus 'performance-based' contracts (Glas & Essig, 2021). The type of contract also differs per industry or organization that designs the contract.

No matter the contract type, contracts provide the framework and boundaries for how contracting parties can and should work together during contract execution. Essentially, the contract lays the foundation for and therefore strongly influences the ongoing dealings between public buyers and their suppliers. Transaction cost theory

Contract type	Characterization
Lump sum/fixed price	Suppliers obtain a fixed remuneration for the work to be performed.
Fixed price plus incentive fee	Provides additional rewards when agreed performance is exceeded.
Cost-reimbursable	Builds on fixed hourly rates for labor and equipment, no bonus or penalty clauses.
	Used when work cannot be adequately specified or when a fixed price constitutes too big a risk for buyer and/ or supplier.
Unit rate contract	Builds on cost for standardized units (e.g., price per m ²).
	Used for standardized activities which are difficult to estimate in terms of volume and timing.
Agreement with price- adjustment (e.g., essentially an adaptation contract)	Used for long-term agreements or the purchase of price- sensitive materials.

 Table 7.1
 Overview of common contract types

suggests that a well-specified contract that stipulates the rights and obligations of both parties, and that explicitly states how various future situations will be handled, protects specific investments from opportunistic behavior (Williamson, 1985).

In addition to the notion of contracts as effective safeguarding devices, contracts can also be seen as coordination, or even adaptation, instruments (Schepker et al., 2014). Public-private relationships are increasingly in need of contracts that help them govern the business they undertake with each other. This is especially relevant in settings characterized by high uncertainty, such as long-term, complex, and/or innovative projects. Contracting increasingly becomes challenging, however, when transacting parties are confronted with large amounts of complexity and uncertainty, as it can be very costly to specify all contingencies. As a result, contracts are generally incomplete, thereby offering imperfect protection against opportunism. Nevertheless, contracts are usually quite extensive documents and have become even more extensive in the last decades. This is partly due to contracts needing to be increasingly legally effective. Many organizations seek to leverage contracts by incorporating many contractual safeguards intended to limit risks resulting from, for example, supplier opportunism.

Another stream of research on contractual specifications builds on agenttheoretical notions (Eisenhardt, 1989). This leads to a distinction between behaviorbased contracts, on the one hand, and outcome-based contracts, on the other (see also Example 7.1). Behavior-based contracts are contracts in which contractual specifications focus on the behaviors, activities, and processes to be carried out by the supplier. According to agency theory, these types of specifications are used when buying organizations can proficiently describe the work that needs to be performed (e.g., task programmability is high) and when the outcomes to be obtained are highly uncertain or difficult to measure (Eisenhardt, 1989). In contrast, when task programmability is low, and outcome uncertainty and measurability are low and high, respectively, agency theory suggests opting for outcome-based contracts, for example, contracts focusing on the outcomes to be obtained or results/performance to be realized. Adopting an outcome-based contract essentially entails shifting risk to the supplier, whereas under behavior-based contracts, risk remains with the buyer (Selviaridis & Wynstra, 2015).

Example 7.1: Behavior-Based Versus Outcome-Based Contracts

Infrastructure construction activities, such as developing, realizing, and maintaining an intersection between two highways, usually involve substantial risk because of their politically sensitive character in combination with the technical and processual risks of intervening in the built environment. While it may be relatively easy to describe the construction activities to be carried out, making a behavior-based contract an option, political decision-making processes surrounding the project are likely to decrease the programmability of tasks, and therefore buyers may be more inclined to opt for outcome-based contracts. There could also be challenges related to performance measurement, as measuring performance would require not only evaluating the technical quality of the intersection, but also the actual use of the intersection including the driving behavior of individual users. This would provide an even stronger argument for outcomebased contracts. However, as user driving behavior and political decision-making would be hard to control for suppliers, they would generally be reluctant to accept the risk that comes with outcome-based contracts.

The notion of contract type is closely connected to the type of specification underlying the purchase. The terms technical and functional specifications, for example, are common in the domain of procuring works and other more physical goods. In the area of business-to-business and business-to-government services, four ways of specifying services can be identified: input, throughput, output, and outcome specifications (Axelsson & Wynstra, 2002).

- Input and throughput specifications closely resonate with behavior-based specifications and entail the inputs needed for service delivery (e.g., a consultant with at least five years of experience in the public sector) and the processes that this service delivery entails (e.g., conducting interviews with group representatives in a certain municipality and drafting a report). Input and throughput specifications can be considered more similar to technical specifications.
- In contrast, output and outcome specifications closely resemble outcome-based specifications and focus on the results that should be achieved (e.g., policy advice for design of the public space) or the (monetary) outcomes that can be derived from those results (e.g., citizen happiness or satisfaction). Output and outcome specifications are more similar to functional specifications.

Especially these latter two types of specifications have become increasingly popular in recent years, with performance-based contracts (Martin, 2002) increasingly being adopted in public procurement as they allow risk to be shifted to suppliers and thereby help to remedy problems that organizations usually experience when using more traditional contracts.

Under performance-based contracts, buyers specify functional outcomes to be achieved and leave it to suppliers to determine how to achieve those outcomes, see Example 7.2. This also means that if they make an error, the supplier is responsible for any consequences. In contrast, when failing to meet outcomes under behavior-based contracts, a supplier can always point a finger at the buyer, as they were the ones dictating the 'how'.

Example 7.2: Outcome-Based Contracts

When (re)constructing a road under a behavior-based contract, the buyer would determine how the supplier would perform the logistics on the construction site, while under a performance-based contract, a buyer can ask the supplier to secure the traffic flows. This leaves the supplier with more flexibility in the solutions that they deliver but also with more responsibility.

For subsequent maintenance of the road, buyers may contract the number of vehicle movements rather than the maintenance activities, leaving the maintenance provider free to decide when and how to perform the maintenance, as long as a certain number of vehicles can continue to pass through the intersection.

At the same time, performance-based contracts are no panacea. Transaction characteristics (e.g., task programmability, outcome uncertainty, and outcome measurability) as well as relationship (e.g., alignment of buyer and supplier goals; prior experience) and organizational characteristics (e.g., buyer's versus supplier's risk averseness) determine whether performance-based contracts are or are not recommended (Wynstra, 2015). Table 7.2 provides an overview of characteristics that could influence the choice for a certain type of contract. While buyers may be

		Performance-based	Behavior-based
Level	Characteristic	contracts	contracts
Task	Information about processes to be executed is available		+
	Processes to be executed can be described well		+
	Outcomes can be predicted well	+	
	Outcomes can be measured well	+	
Relationship	Buyer and supplier goals are not aligned	+	
	Buyer and supplier know each other well		+
Organization	Buyer is risk-averse	+	-
	Supplier is risk-averse	-	+

Table 7.2 Deciding on performance-based versus behavior-based contracting

interested in shifting risk to suppliers, suppliers in turn must be able and willing to deal with the risk profiles associated with performance-based contracts. One should therefore carefully consider the use of this contract type, or more specifically the type of contractual specification, given the characteristics of the transaction at hand. More generally, it is important to note that while the dichotomy of behavior-versus outcome-based is helpful in thinking about types of contracts, it also oversimplifies the context, as many contracts contain both behavior-based and outcome-based clauses. This notion underlines the importance of balancing the two types of contractual provisions, with the most appropriate ratio between outcome-based or performance-based and behavior-based clauses differing from contract to contract.

7.3 Rewards and Incentives

Another important element of contract design are the reward structures adopted, as these serve to incentivize suppliers to act in a certain way, such as displaying the specified or desired behaviors or achieving the agreed upon performance targets. Rewards are important in any type of contract but play a particularly important role in performance-based contracts, as these types of contracts tie at least part of the supplier's reward, including contract extensions and new contracts, to the extent to which the outputs, quality, and results are achieved (Martin, 2002).

Most commonly, rewards entail a specific form of remuneration, for example, fixed or variable compensation, or a combination thereof, which is subsequently tied to contractual specifications. Suppliers may receive a fully fixed fee upon completing a task, for example, one payment for the cleaning of an entire carpark. Alternatively, a variable fee that corresponds to demand may be offered, for example, the number of vehicles that need cleaning in a specific period. Finally, a combination of a partially fixed fee to compensate for a certain level of costs and a variable fee to compensate for the resources needed to clean 40 vehicles a month and an additional compensation for extra vehicles being cleaned. Compared to costreimbursable contracts, where the supplier can claim all their efforts and expenditures, the fixed and variable fee contracts entail more risk for suppliers: in the example, intensively used vehicles will take longer to clean, while compensation remains unchanged.

Rewards may also be tied to performance, such as only rewarding the supplier in case a certain level of cleanliness is achieved, to be verified using images of the desired result (i.e., what the vehicle should look like). Here, challenges regarding the evaluation of results increase the risk for suppliers: in the example, the assessment of the extent to which the image of the cleaned vehicle corresponds to the image in the reference picture is subjective. Based on this, one would expect that the increased risk associated with more performance-based contracts would make a supplier reluctant to engage in such agreements, and indeed, many suppliers are unwilling or unable to accept the increased levels of risk, for example, because they

feel they cannot fully control the result. While outcome uncertainty has traditionally been proposed to stem from external contingencies such as the economic climate and regulatory environment (Eisenhardt, 1989), or from force majeure, more recent insights reveal buyer inputs (Nullmeier et al., 2016) to be another important source of uncertainty. It is therefore important to not only consider specific Key Performance Indicators (KPIs) for suppliers, but also for buyers, as they fulfill specific roles through which they provide suppliers with inputs that are essential to their processes (Sampson & Froehle, 2006).

Example 7.3: Buyers as a Source of Outcome Uncertainty in a Dyadic Relationship

A large telecom company that launched a marketing campaign felt that the supplier's delivery performance fell substantially short of expectations. When confronting the supplier, they indicated that the briefing for the proposed design of the campaign had been returned over 20 times before it was finally approved and signed, which largely explained the delay of the detailed design and subsequent launch of the campaign.

In particular cases, it is not only the buyer that is a source of uncertainty, but also the buyer's customer(s). More and more, public buyers operate in triads rather than dyads (Choi & Wu, 2009), for example, when an executive agency outsources the maintenance to road infrastructure that is used by the general public to a specialist supplier. As a result, a triadic structure (e.g., the smallest unit of a network) emerges involving the buyer, the buyer's customer, and the supplier, and such triadic structures become more and more common. Think, for example, of the cleaning of public transport vehicles or the food catering in hospitals. In the example of outsourcing road maintenance, users are not only confronted with the result of maintenance (e.g., how long before the road starts to deteriorate) but also with the process of maintenance, for example, when maintenance activities require roads to be partially or fully closed. Users are a source of uncertainty for the supplier as their driving behavior greatly impacts the quality deterioration of the road and hence impacts the timing of maintenance. Users may even impact the maintenance activities being carried out, for example, when they do not sufficiently slow down when passing road works.

Example 7.4: Buyers as a Source of Outcome Uncertainty in a Triadic Relationship

In public transportation, the cleaning of vehicles (trains, buses) is subject to the buyer's planning capabilities: vehicles that are delayed or redirected may leave the supplier with a surplus of staff at one location, while being short-staffed on another. Note that in this case, the buyer's customer (passengers) is an important additional source of uncertainty, for example, do they dispose of their trash in the bin or leave things on the seats and floor.

Triadic structures also bring challenges in terms of contractual relationships. While users have a certain arrangement with the buyer to use the services provided by utilities such as roads (equivalent to but not necessarily a contract), the buyer has a formal contract with the supplier for performing maintenance. Users and suppliers interact during maintenance, but have no agreement or arrangement. This means that buyers have to make sure that their contracts with suppliers are aligned with the agreements with and obligations to users (e.g., availability of the road for users should be a priority for the supplier as well as for the buyer). Hence, in the absence of agreements or contracts on every dyad in the triad, managing all three actors in the triad remains challenging. This is, for example, the case with the speeding on economic infrastructures: roads deteriorate faster and require more maintenance, thereby limiting the availability of these infrastructures. Neither the buyer nor the supplier are to blame here, but they have to deal with the consequences. Such challenges become even more prominent and larger when considering larger networks or ecosystems, which involve many direct and indirect relationships with various kinds of stakeholders (Tsujimoto et al., 2018). All these stakeholders need to somehow be governed in the same direction, which requires goal alignment, and sometimes tradeoffs between parties to align one party's interests with the other in view of the greater whole (Aarikka-Stenroos & Ritala, 2017).

Turning back to performance-based contracts, their use has been growing but is still quite limited compared to fixed price and cost-reimbursable contracts (Sumo et al., 2016). Buying organizations give several reasons for why this is the case: a fear of losing control, insufficient expertise to effectively pursue a performance-based contract, and implementation challenges, as performance-based contracts typically require different contract management and performance measurement approaches. The type of remuneration selected is likely to affect the supplier's efforts and behaviors. Under a fixed fee, suppliers will be inclined to increase efficiency to maximize the economic value that the transaction will bring them. In contrast, under cost-reimbursable fees, suppliers have no incentive to work faster, in fact, they might move slower.

Performance-based contracts usually involve additional incentives on top of the basic reward structure in the form of bonuses (e.g., 10% extra payment in case 80% of the vehicles receives the qualification 'very good') or penalties (e.g., a 10% deduction in case less than 80% of the vehicles qualify as 'very good'). While these two examples may look similar, they involve different 'frames' (Weber & Mayer, 2011) and are therefore quite different. In the case of the bonus, the supplier has something to gain with good performance, while poor(er) performance has no consequences. In contrast, under the penalty, the supplier has no real incentive to score much higher than the target, but they do have an interest in avoiding underperformance. Consequently, bonus and penalty regimes will trigger different types of behaviors with suppliers and in turn also affect the development of the relationship between the buyer and supplier (Selviaridis & Van der Valk, 2019). The size of the bonus or penalty clearly plays a significant role, therefore the use of (a combination of) bonuses and penalties should be proportional to the efforts required from the supplier to realize the bonus or avoid the penalty.

7.4 Contract Execution and Management

After drawing up and signing the contract, the contract execution stage starts. The term contract execution refers to the implementation and subsequent management of the contract and the supplier relationship. While implementation means 'doing the work' as agreed in the contract, contract management encompasses activities related to contract monitoring, enforcing, coordination, and cooperation (Nullmeier, 2019). Contract monitoring relates to establishing the extent to which contractual agreements are complied with, also known as compliance monitoring (Heide, 1994), but also to gathering supplier performance information (e.g., through audits or customer satisfaction surveys) and providing feedback. Compliance monitoring does. Enforcing entails a buyer's response to contract violations and may include warnings or invoking penalties. Finally, contract management also involves activities aimed at coordinating actions of buyer and supplier, such as by means of alignment or adaptation, and at facilitating interest (re)alignment, such as aligning objectives and incentives.

The ex-ante design of contracts greatly impacts their ex-post use in the execution stage, as the objects for monitoring, the enforceability of contracts, and the extent to which the original agreements allow for the adaptations that may facilitate alignment reside in the various contractual clauses that have been drawn up. For example, the type of specification (e.g., behavior- vs outcome-based) determines whether behaviors or outcomes will be monitored and evaluated. The focus of evaluation is clearly reflected in the KPIs that the buyer uses to determine to what extent contract execution is in line with what was agreed upon and the supplier performance. The execution of payment schemes is usually dependent on the evaluation. The level of detail and clarity of contractual provisions will determine the extent to which the buyer is able to identify deviations and whether these constitute violations, and if so, what enforcement actions are available. It is also important to note here that not all contract violations stem from supplier opportunism-honest incompetence could also lead to the deviations that underlie contract violations. The more specific a contract is, the more information it may contain regarding how to align actions and interests. At the same time, very specific clauses may provide very specific directions for buyers, thereby excluding alternatives from being considered, let alone implemented. In contrast, clauses that are less specific may facilitate the adjustments and adaptations that are typically non-contractable in the sense that organizations cannot devise and enforce contracts on these behaviors (Miller et al., 2022), but such freedom may also be consciously or unconsciously misused.

Alternatively, organizations may resort to a 'social contract', for example, the unwritten rules and expectations regarding behaviors and ongoing interactions. Every contracting decision takes place in the context of a specific relationship, existing or new, continued or interrupted, previously successful or unsuccessful, and so on. Hence, relationships between buyers and suppliers are also partly governed by 'relational' aspects such as trust and social norms, the foundations for which can already be laid out in the social contract. This relational context will drive

Level of codification of	Ways to enforce principles		
governance mechanisms			
ruling principles	Contractual	Relational	
Formal	Codified enforceable promises	Codified patterns of expected	
	regarding rights and obligations	behaviors (e.g., regarding	
	(e.g., regarding termination)	meeting procedures)	
Informal	Uncodified enforceable promises	Uncodified patterns of	
	regarding rights and obligations	expected behaviors (e.g.,	
	(e.g., regarding division of tasks)	regarding trust)	
Formal Informal	Codified enforceable promises regarding rights and obligations (e.g., regarding termination) Uncodified enforceable promises regarding rights and obligations (e.g., regarding division of tasks)	Codified patterns of expect behaviors (e.g., regarding meeting procedures) Uncodified patterns of expected behaviors (e.g., regarding trust)	

Table 7.3 The informal side of contracts versus the formal side of relationships

to what extent formal and informal mechanisms are deployed, and the ease with which these mechanisms can be established. In enduring relationships, which are generally more successful, it will be easier to explicate and obtain a mutual understanding of unwritten rules and expectations than in new relationships. In other words, the supplier relationship will usually be managed both formally (e.g., compliance and performance monitoring, and subsequent alignment and/or enforcement) and more informally (e.g., through relational mechanisms such as trust and social norms). Note however that formal here is not the same as contractual and that informal is not the same as relational: rather, formal (e.g., written) relates to agreements being legally enforceable. Legally enforceable means that the contract includes clauses regarding performance, for example, or codified expectations regarding behaviors to be displayed, such as relational norms (Keller et al., 2021). This is depicted in Table 7.3. Organizations may therefore consider to what extent they could and should explicate desired behaviors relating to the task-at-hand or to more general organizational practices such as communication and escalation procedures.

Whether it is contractual or relational governance that is most effective in driving performance, or both, it is important to note that any contracting situation will involve a contract agreement and a relationship. Contractual implementation is more a matter of effectively combining contractual and relational governance mechanisms (Warsen, 2021), which requires a careful balance between and tuning of both mechanisms. Governance design is therefore not a one-siz-fits-all activity, but one which is highly tailored for each and every contracting situation. It is also not an activity that only takes place during contract design, but one which requires ongoing attention during contract execution, as both mechanisms may (need to) dynamically evolve.

7.5 Contract Analysis for Redesign and Learning

The writing, interpretation, and application of contracts may drive relationships into cooperation and flexibility or into escalation and distance (Abdi & Aulakh, 2017). In some cases, contracts need to be terminated before the actual contract period has expired. Deviations from what was agreed upon in the contract may trigger

discussions that cannot easily be resolved. Contract disagreements are a leading reason for litigation across industries, accounting for as much as 70% of legal disputes in sectors such as infrastructure, mining, or energy (Fullbright, 2020). Discussions usually focus on who is responsible for the deviation and to what extent that party can be held accountable for direct and indirect performance effects and therefore is liable to cover any associated costs. In other words: whether the contract has been violated and by whom. The large risks involved for both parties, usually in the form of large financial consequences and/or reputational damage, result in buyers and suppliers resorting to a legal rather than a content-based discussion and opting for arbitration or even litigation rather than more private dispute resolution procedures such as negotiation or mediation (Lumineau & Oxley, 2012). While legal procedures may provide clear outcomes that are binding for both parties, such rulings usually do not help to identify and eliminate root causes and can instead put further stress on the relationship, thereby frustrating any future collaboration (Fang, 2019).

For this reason, more and more organizations nowadays opt for more problemsolving and learning-oriented approaches to deviations and as such avoid disputes or at least prevent them from being so severe that they cannot be overcome. Obviously, incidents that occur need to be addressed for contract execution to continue, and guidance for addressing (certain types of) deviations may already be provided in the contract. For example, continuing to invoke penalties while the supplier cannot be held (fully) accountable for performance deviations could frustrate the current relationship and reduce the chances of successful future collaborations. Therefore, rather than merely addressing these incidents, organizations may also opt for trying to understand why incidents occur as to prevent them from occurring in the future. Perhaps specifications are not clear enough, the role of the buyer is not optimal, or the reality is different from what was anticipated when the contract was drawn up. All such observations may enhance organizations' understanding of the effectiveness of contracts and may subsequently lead to more flexible contract application, improved design of future contracts, or even current contract redesign (Faems et al., 2008). In contrast, the 'blame game' discussed earlier usually results in a loss of communication and in organizations disconnecting, dodging responsibility, and focusing on damage control and/or contract termination.

In situations where organizations are highly dependent on each other, a focus on adaptation and learning is expected to be more productive. Previous research (Nikulina, 2021) has highlighted the need to distinguish between inter-contract learning (e.g., how do organizations learn from one contract to another (Vanneste & Puranam, 2010)) and intra-contract learning (e.g., dynamically improving a contract during execution). The latter has typically received less scholarly attention than the former, which could point to a general lack of awareness of the possibility to adjust contracts, mainly because in general, public organizations think they are not allowed by law to make such adjustments. To facilitate adjustments derived from learning, organizations could, for example, think about how and to what extent the contract could be designed to accommodate this? Designing contractual clauses in ways that allow for adjustment would involve thinking through what scenarios

would realistically require adjustments (resolvable by content experts without legal repercussions) or a substantive change (e.g., having legal repercussions and hence requiring the involvement of legal experts), and subsequently specifying procedures for implementing these adjustments/substantive changes (e.g., processes to follow, stakeholders to involve, who are the decision-makers).

7.6 Summary

This chapter discussed contracting in a public sector context. In terms of contract design choices, a wide variety of contracts are available, each with specific advantages and disadvantages, and contexts in which they are appropriate. Therefore, contract design warrants careful thinking on the side of the buying organization in assessing the applicability of different contract types for the transaction at hand and trading off their respective pros and cons in terms of risk, degrees of freedom, and expected supplier behavior. The contract cannot be viewed in isolation from the relationship between the buyer and supplier, and organizations need to effectively deploy both the contract and the relationship to maximize relational outcomes. The effect the contract can have on the level of trust between the two parties needs to be carefully considered, such as when does the contract make the relationship redundant and when could it even harm the relationship? Finally, this chapter explained that a contract should not be viewed as a one-off effort preceding the exchange; rather, it should be a living document, which is proactively used to monitor and manage the exchange process and take corrective actions when needed.

References

- Aarikka-Stenroos, L., & Ritala, P. (2017). Network management in the era of ecosystems: Systematic review and management framework. *Industrial Marketing Management*, 67, 23–36.
- Abdi, M., & Aulakh, P. S. (2017). Locus of uncertainty and the relationship between contractual and relational governance in cross-border interfirm relationships. *Journal of Management*, 43(3), 771–803.
- Atiyah, P. S. (1989). An introduction to the law of contract. Claredon Press.
- Axelsson, B., & Wynstra, J. Y. F. (2002). Buying business services. Wiley.
- Cao, Z., & Lumineau, F. (2015). Revising the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *Journal of Operations Management*, 33-34(January), 15–42.
- Choi, T., & Wu, Z. (2009). Taking the leap from dyads to triads: Buyer-supplier relationships in supply networks. *Journal of Purchasing and Supply Management*, 15, 263–266.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategies and sources of interorganizational competitive advantage. Academy of Management Review, 23(4), 660–679.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. The Academy of Management Review, 14(1), 57–74.

- Faems, D., Janssens, M., Madhok, A., & van Looy, B. (2008). Toward an integrative perspective on alliance governance: Connecting contract design, trust, dynamics, and contract application. *Academy of Management Journal*, 51(6), 1053–1076.
- Fang, F. (2019). When performance shortfall arises: Contracts or trust? A multi-method study of the impact of contractual and relational governances on peformance in Public Private Partnerships. Retrieved from Department of Management, Tilburg School of Economics, Tilburg University.
- Ferguson, R. J., Paulin, M., & Bergeron, J. (2005). Contractual governance, relational governance, and the performance of interfirm service exchanges: The influence of boundary-spanner closeness. *Journal of Academy of Marketing Science*, 33(2), 217–234.
- Fullbright, N. R. (2020). Litigation Trends Annual Survey.
- Gardet, E., & Mothe, C. (2011). The dynamics of coordination in innovation networks. *European Management Review*, 8(4), 213–229.
- Glas, A., & Essig, M. (2021). Management of performance-based contracting. In T. Choi, J. Li, D. Rogers, J. Rungtusanatham, T. Schoenherr, & S. Wagner (Eds.), *The Oxford Handbook of Supply Chain Management*. Oxford University Press.
- Heide, J. B. (1994). Interorganizational governance in marketing channels. *Journal of Marketing*, 58(1), 71–85.
- Keller, A., Lumineau, F., Mellewigt, T., & Ariño, A. (2021). Alliance governance mechanisms in the face of disruption. *Organization Science*, 32(6), 1542–1570.
- Klein Woolthuis, R., Hillebrand, B., & Nooteboom, B. (2005). Trust, contract and relationship development. Organization Studies, 26(6), 813–840.
- Lumineau, F., & Oxley, J. E. (2012). Let's work it out (or we'll see you in court): Litigation and private dispute resolution in vertical exchange relationships. *Organization Science*, 23(3), 820–834.
- Martin, L. L. (2002). Performance-based contracting for human services: Lessons learned for public procurement? *Journal of Public Procurement*, 2(1), 55–71.
- McNeil, I. R. (1978). Contracts: Adjustment of long-term economic relations under classical, neoclassical and relational contract law. Northwestern University Law Review, 72, 854–905.
- Miller, J., Skowronski, K., & Saldanha, J. (2022). Asset ownership & incentives to undertake noncontractible actions: The case of trucking. *Journal of Supply Chain Management*, 58(1), 65–91.
- Nikulina, A. (2021). Interorganizational governance in projects: Contracts and collaboration as alignment mechanisms. Erasmus University Rotterdam.
- Nullmeier, F. M. E. (2019). *Effective contracting of uncertain performance outcomes: Allocating responsibility for performance outcomes to align goals across supply chain actors*. Erasmus University Rotterdam.
- Nullmeier, F. M. E., Wynstra, J. Y. F., & van Raaij, E. M. (2016). Outcome attributability in performance-based contracting: roles and activities of the buying organization. *Industrial Marketing Management*, 59, 25–36.
- Petersen, B., & Ostergaard, K. (2018). Reconciling contracts and relational governance through strategic contracting. *Journal of Business and Industrial Marketing*, 33(3), 265–276.
- Praxmarer-Carus, S. (2014). Why the proposal of a complex contract may harm or foster a partner's trust. *Journal of Business Research*, 67(7), 1421–1429.
- Roehrich, J. K., Selviaridis, K., Kalra, J., van der Valk, W., & Fang, F. (2021). Inter-organizational governance: A review, conceptualisation and extension. *Production, Planning & Control*, 1–17.
- Roehrich, J. K., Tyler, B. B., Kalra, J., & Squire, B. (2021). The decision process of contracting supply chain management. In T. Choi, J. Li, D. Rogers, J. Rungtusanatham, T. Schoenherr, & S. Wagner (Eds.), *Handbook of 'Supply chain management'*. Oxford University Press.
- Sampson, S. E., & Froehle, C. M. (2006). Foundations and implications of a proposed univied services theory. *Production and Operations Management*, 15(2), 329–343.
- Schepker, D. J., Oh, W. Y., Martynov, A., & Poppo, L. (2014). The many futures of contracts: Moving beyond structure and safeguarding to coordination and adaptation. *Journal of Management*, 40(1), 193–225.

- Selviaridis, K., & van der Valk, W. (2019). Framing contractual performance incentives: Effects on supplier behaviour. *International Journal of Operations & Production Management*, 39(2), 190–213.
- Selviaridis, K., & Wynstra, J. Y. F. (2015). Performance-based contracting: State of the art and future research directions. *International Journal of Procuction Research*, 53(12), 3505–3540.
- Sumo, R., van der Valk, W., van Weele, A. J., & Bode, C. (2016). Fostering incremental and radical innovation through performance-based contracting in buyer-supplier relationships. *International Journal of Operations & Production Management*, 36(11), 1482–1503.
- Tsujimoto, M., Kajikawa, Y., Tomita, J., & Matsumoto, Y. (2018). A review of the ecosystem concept — Towards coherent ecosystem design. *Technological Forecasting and Social Change*, 136, 49–58.
- Van der Hurk, M., & Verhoest, K. (2016). The challenge of using standard contract in publicprivate partnerships. *Public Management Review*, 18(2), 278–299.
- Vanneste, B., & Puranam, P. (2010). Repeated interactions and contractual detail: Identifying the learning effect. Organization Science, 21(1), 186–201.
- Warsen, R. (2021). Putting the pieces together: Combining contractual and relational governance for successful Public Private Partnerships. Erasmus University Rotterdam.
- Weber, L., & Mayer, K. J. (2011). Designing effective contracts: Exploring the influence of framing and expectations. Academy of Management Review, 36(1), 53–75.
- Williamson, O. E. (1985). The economic institutions of capitalism. The Free Press.
- Wynstra, J. Y. F. (2015). Prestatiecontracten in dienstentriades: Sturen op resultaat vanaf de zijlijn. [Performance contracts in service triads] Nevi NRS, 12–18.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (http://creativecommons.org/licenses/ by-nc-nd/4.0/), which permits any noncommercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if you modified the licensed material. You do not have permission under this license to share adapted material derived from this chapter or parts of it.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

