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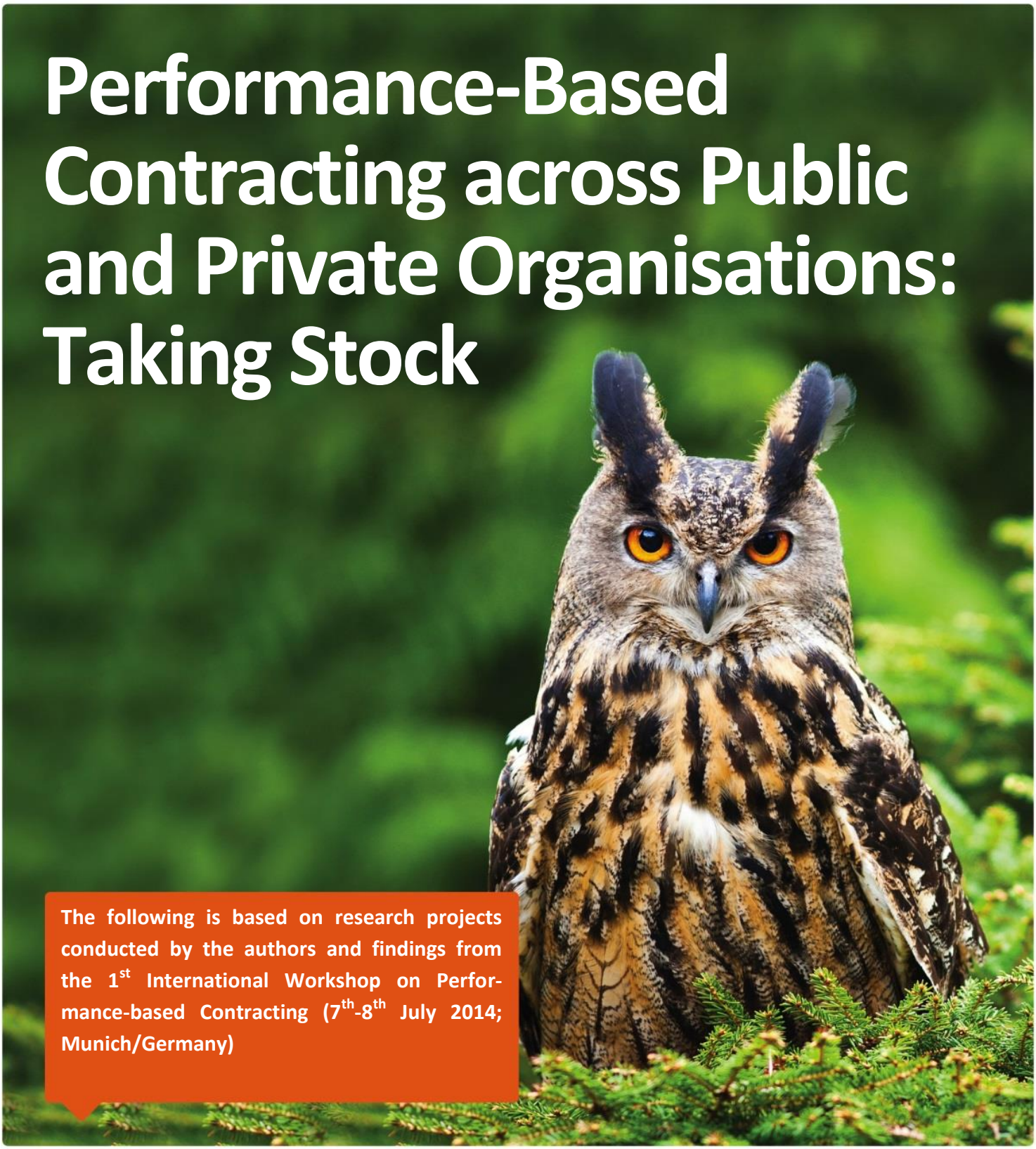
Performance-Based Contracting across Public and Private Organisations: Taking Stock



The following is based on research projects conducted by the authors and findings from the 1st International Workshop on Performance-based Contracting (7th-8th July 2014; Munich/Germany)

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Performance Based Contracting (PBC): Setting the scene

Recently there has been a shift of emphasis towards outcomes and results in manufacturing and service industries across the private and public sector. Performance-based contracting (PBC) has emerged as a promising strategy for effective and efficient sourcing of goods, services and integrated solutions (Glas et al., 2013; Selviaridis, 2011). PBC is closely associated with the new emphasis on buying and selling *"performance"*, *"results"*, or *"outcomes"*. An early example of PBC is Roll Royce's *"Power by the Hour"* (PBH) business model, in which the company is paid for providing maintenance services, based on availability of the engine in terms of flight hours, rather than based on the cost of labour and spare parts (Neely, 2008). Government agencies and local authorities are also being urged to implement PBC to improve accountability for public spending. For example, business-to-government (B2G) services delivered under PBC include, amongst others, employment services, healthcare, public transport, and infrastructure maintenance. PBC is also highly relevant to the defence sector where contracts for availability and capability have been adopted by the US and European defence agencies as a performance-oriented acquisition strategy (Ekström, 2012).

PBC conceptualisation

The term PBL was coined by the US Department of Defense (DoD) in the early 2000s (Berkowitz et al., 2004). Depending on the context of application, there is a wide variety of terms describing PBC and similar concepts. Alternative and closely related terms include *"outcome based contracting"* (OBC), *"contracting for availability"* (CfA), *"contracting for capability"* (CfC), *"procurement of complex performance"* (PCP), *"performance based service acquisition"* (PBSA), *"pay for performance"* (P4P), and *"performance based logistics"* (PBL). These terms are often used interchangeably, or applied in specific contexts, to emphasise the shifting emphasis towards buying and selling results and outcomes (Martin, 2007). Similarly, even if they are not considered to be synonymous, PBC is also closely associated with concepts such as product-service systems (PSS) and servitization (Baines et al., 2009).

From an academic research perspective, there are a growing number of academic papers published on PBC (Selviaridis, 2011). One of the reasons why PBC is gaining not only practitioners, but also academics' attention is its linkage to research on the servitization of manufacturing, and incentives, which is often implemented in the shape of result-oriented PSSs. PBC is a relevant topic for the OSM research field for two main reasons. First, PBC can facilitate supply chain coordination and collaboration to realise end customer outcomes by aligning incentives and sharing rewards and risks among supply chain actors (Randall et al., 2010). Second, PBC can provide the basis for incorporating environmental and societal outcomes into supply chain operations. This is relevant given the growing emphasis on sustainable operations and supply management (Pagell and Wu 2009). However, while the prominence of PBC in management practice is reflected in the burgeoning practitioner and academic literature on the topic, the literature is still rather fragmented across disciplines (e.g. Operations and Supply Management, Marketing and Service Science/Service Management) and application contexts (e.g. healthcare, construction and defence acquisition) and further efforts are needed to bring together these diverse strands of research.

Why PBC?

The objective of PBC is to provide a contract structure that gives the supplier incentives to make investments in order to increase operational availability and reliability, keep development costs under control, ensure profit margins for the supplier and reduce the costs for the end user (Kim et al., 2007; Ng et al., 2009). An important aspect of PBC is that the responsibility and risk taking in achieving the desired result is transferred from the buyer to the supplier. Successful adoption of performance-based payment schemes therefore depends on the willingness of the supplier to bear increased financial and operational risks especially in cases where service performance is contingent on the inputs and performance of other actors in the supply chain (Selviaridis and Norrman, 2014). This comes hand in hand with a paradigm shift from transaction based equipment acquisition to performance based acquisition. Moreover, performance-based contracts have been positioned to bring about service innovation and potentially act as a vehicle to explore different aspects of value co-creation in new types of partnering solutions, e.g. Public Private Partnerships (PPPs) (Lewis and Roehrich, 2009). This has resulted in a situation where organisations are necessitated to widen its view of innovation, and also embrace the services aspect. Instead of the traditional value proposition, where equipment and support were divided into different offerings, organisations now move in the direction of offering and procuring integrated product-service bundles through performance-based contracts. From the point of view of the public sector, the idea behind this is to invite the industry to assume a larger responsibility for the entire life cycle of the system and to incentivise industry to decrease the Total Cost of Ownership (TCO). Moreover, PBC entails increased risks and rewards for the supplier as performance achievement translates into financial bonuses and/or penalties (Carlson et al., 2010). PBC also further stresses the co-production of specified outcomes through customer-supplier interactions. PBC, as opposed to other forms of contracting, emphasises the bi-directionality of supply chains and the customer's role and responsibilities in achieving desired performance (Sampson and Spring, 2012).

Addressing the shortcomings

While the idea of performance has gained increased attention over the last decade or so, there are still a number of problems associated with PBC: a *"definition problem"* (i.e. what to measure); a *"measurement problem"* (i.e. when, where and how to measure); and a *"comparison problem"* (i.e. with what to compare) (Ekström, 2012). In addition, the terms *"performance", "profitability", "productivity", "effectiveness"* and *"efficiency"* are often not defined, confused with each other, and/or used as synonyms (van Weele, 2002). One way of measuring performance is to consider it to be a combination of effectiveness and efficiency (Neely et al., 1996). For instance, in defence acquisition, effectiveness is often measured in four dimensions: speed, cost, quality, and contracted availability (Hambleton et al., 2005), even if there are also other possibilities, e.g. flexibility and dependability. Furthermore, efficiency is often equated with Value-for-Money (VfM) (Arrowsmith, 2010). Performance evaluation can be conducted at different levels, e.g. at the supplier level, where the financial performance can be assessed against specific indicators, or at the end-user level, where the service impact on beneficiaries can be assessed (Gates et al., 2004). Similarly, prior studies

have argued that payment-by-outcome works best in public services where there are 'known unknowns' (Sturgess and Cumming, 2011). When linkages between inputs and outcomes are well understood and tightly connected, there is little point in specifying outcomes and when these linkages are so poorly understood that there is very little agreement about the relationship between effort and outcome, it will be virtually impossible to write an outcome-based contract that effectively transfers risk (Sturgess and Cumming, 2011).

In summary, to date, PBC has been used for a wide variety of products and services, including advanced platforms and complex, integrated technical systems; spares provisioning and system availability across different sectors. Consequently, there is a wide variety in the practical application of PBC and academic interest in further investigating PBC and its different application contexts. However, PBC are by no means always appropriate. Practitioners, academics and policymakers alike must be clear about the challenges they are grappling with and the nature of the interventions that are most likely to work.

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