

# Strengthening Outcomes Based Capital Project Delivery <sup>1</sup>

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Over the course of my career I have looked at a number of underperforming mega-projects. In every instance there was a common element of underperformance, the lack of clarity around the strategic business outcomes<sup>2</sup> to be accomplished. Conversely, some of the best performing projects exhibited high clarity of recognized and shared outcomes.

This paper looks at the imperative to continue the shift to outcomes based contracts versus more traditional output based contracting forms. This shift is discussed from the perspective of the engineering and construction industry in the United States but draws upon the experience in other countries and other sectors.

Outcomes based contracting strategies hold promise for delivery of large complex projects that today face unsustainable performance challenges with over two thirds of large complex projects in the sector failing.<sup>3</sup>

A range of outcome based strategies are available and are discussed in this paper and three core principles outlined.

It is useful to begin by defining outcomes based contracts, in part because they go by different names in different sectors.

## Definition of Outcomes Based Contracting

Outcome based contracting (OBC) has been defined as a:

- **“contracting mechanism that allows the customer to pay only when the firm has delivered outcomes, rather than merely activities and tasks”** <sup>4</sup>

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<sup>2</sup> Project Management Theory and the Management of Large Complex Projects; *PM World Journal*; Vol. IV, Issue VI – June 2015

<sup>3</sup> Is it Time to Rethink Project Management Theory?; *PM World Journal*; Vol. IV, Issue III – March 2015

<sup>4</sup> Outcome-based contracts as a driver for systems thinking and service-dominant logic in service science: Evidence from the defence industry; Ng, Maull, and Yip, 2009: 377; views performance-based contracting as its narrower equivalent

The authors<sup>5</sup> of “*A guide to outcome-based agreements; A better way to do business*” define an outcomes based agreement (OBA) as:

- **“An agreement between a customer and supplier in which the supplier is contracted to directly achieve business outcomes for and with the customer - rather than being contracted in terms of delivery of the supplier’s inputs, outputs or deliverables.”**

Bramwell<sup>6</sup> states that:

- “Outcomes-based contracts focus on achieving required outcomes rather than a contract for the supply of a set of prescribed specifications.

The agreement thus represents a joint endeavor between both supplier(s) and customer and is dependent upon working relationships and shared understanding. Interests are aligned. It is also possible to contract for partial achievement (a defined contribution to a defined outcome).

In the US government sector, the Government Performance and Results Act of 1993<sup>7</sup> made formal, outcomes based performance evaluations mandatory for federal programs. It continued and broadened the federal government’s efforts to realign the focus of government accountability and performance analysis away from activities and process measures and toward results or outcomes.

Specifically, the act requires federal agencies to develop:

- a strategic plan that specifies agency goals and how they will be achieved
- an annual performance plan that specifies quantitatively measurable goals and performance indicators, as well as levels of performance to be achieved
- an annual program performance report that compares actual performance with performance goals

From the legislation.... ‘outcome measure’ means an assessment of the results of a program activity compared to its intended purpose.

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<sup>5</sup> Intellect’s Outcome-Based Agreements Group

<sup>6</sup> What is Performance Based Building?; 2003

<sup>7</sup> Pub. L. 103–62

The US Department of Defense (DOD) utilizes different terminology when considering outcome based contracts referring to them as a Performance-Based Services Acquisition (PBSA)<sup>8</sup>. DOD defines a PBSA as “one that allows a contractor to deliver the required service by following its own best practices. Since the prime focus is on the end result, contractors can adjust their processes, as appropriate, through the life of the contract without the burden of contract modifications provided that the delivered service (outcome) remains in accordance with the contract. The use of incentives further motivates contractors to furnish the best performance of which they are capable.” The parenthetical “outcome” is DOD’s. The Department of Energy (DOE) similarly uses PBSA where practical.

The DOE in 2000 awarded a 10-year, \$2.4 billion closure contract for the Fernald site. DOE linked fee with cost and schedule performance and provided significant monetary incentives to accelerate the closure schedule while at the same time minimizing costs. The closure contract was modified again in 2003 to place greater emphasis on accelerating the schedule, providing a modest increase in annual funding. Fernald was the first site in the DOE complex to pursue an accelerated cleanup plan, proving that incentive-based, outcomes contracts for DOE closure sites work.

DOE contract reform and transition to performance-based contracting techniques was essential to the success of the accelerated closure concept applied at Rocky Flats. The Cost-Plus-Incentive-Fee contract format was based on a “critical few” performance measures that directly measured “closure”, the desired outcome.

Steps towards the closure concept began in the same time frame as the 1993 Act.

In the UK, an examination of OBC origins and background revealed that the Ministry on Defence (MoD) reached towards “partnering” with its major industry suppliers as a contractual philosophy through intuition and an extension of practice and precedent rather than from any robust theoretical foundation. The rationale for OBC adoption was simply that traditional maintenance, repair and overhaul contract models were demonstrably wasteful and leading inexorably towards an unaffordable future.

The International Association for Contract & Commercial Management (IACCM)

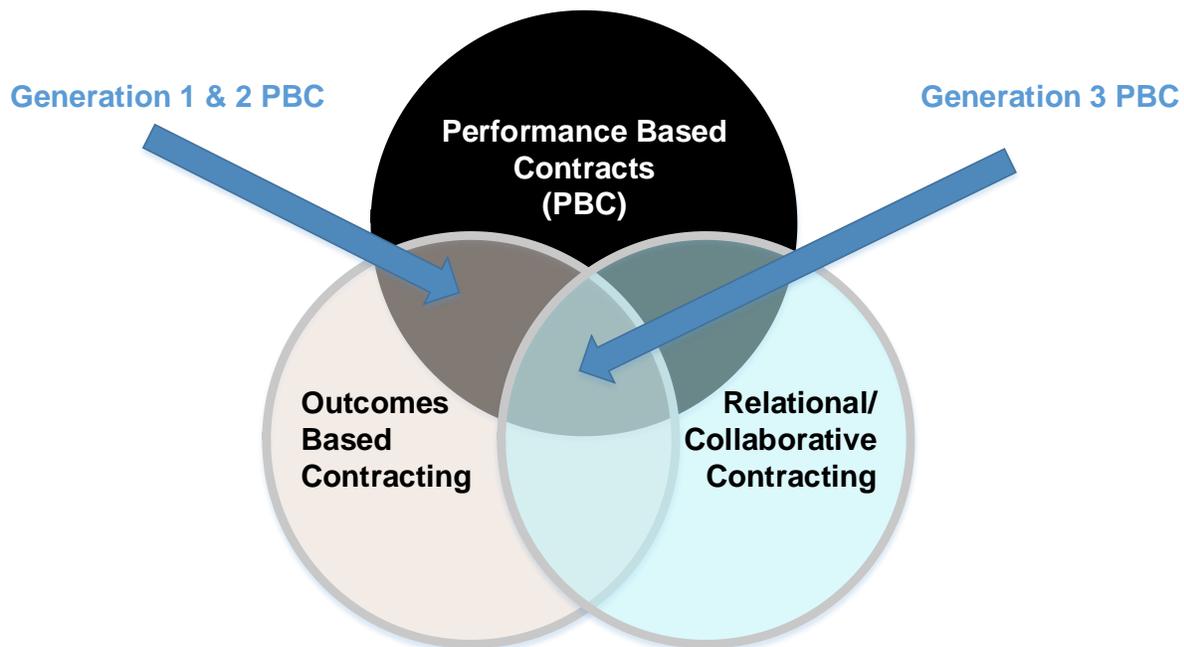
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<sup>8</sup> PBSA involves acquisition strategies, methods, and techniques that describe and communicate measurable outcomes rather than direct performance processes; Guidebook for Performance-Based Services Acquisition (PBSA) in the Department of Defense

terminology differs but still connotes a primacy of outcome focus defining performance-based contracting (PBC) as:

- *“an outcomes-oriented contracting method that ties a range of monetary and non-monetary consequences to the contractor based on their accomplishment of measurable and achievable performance requirements.”*

IACCM presentations further noted that what was referred to as Generation 3 PBCs (hybrid PBC or Outcomes-based) by the Australian Department of Defence included enterprise performance and behaviors in the performance management framework, more tightly linking to agency outcomes.



In healthcare, Avalere<sup>9</sup> found that 59% of payers have executed an outcomes-based contract (OBC). This type of contracting structure is an agreement between a health plan and drug and device manufacturers that ties product reimbursement to clinical, quality, utilization, or financial outcomes.

In various industrial applications, outcome-based contracts that pay for effectiveness (the

<sup>9</sup> Healthcare consulting firm

highest level of performance<sup>10</sup>) and penalize performance shortcomings have been introduced to incentivize cost reduction efforts on the contractor side of product service systems (PSSs). Outcome-based contracting concepts are being used for PSS acquisitions in healthcare, energy, military systems and infrastructure. These contracts allow customers to pay only for the specific outcomes achieved (e.g., availability) rather than the workmanship and materials delivered. In the IT industry Gartner estimates that one third of all IT contracts are based on program outcomes.

Outcome-based contracts, also referred to as outcome-based logistics; performance contracting; availability contracting; contract for availability” (CfA); performance-based service acquisition (PBSA); performance-based logistics (PBL); and performance-based contracting, refers to a group of strategies for system support that instead of contracting for goods and services, a contractor delivers performance outcomes as defined by performance metric(s) for a system under contract. The fundamental idea behind outcome-based contracting is reflected in a famous quote from Theodore Levitt: “The customer doesn’t want a drilling machine; he wants a hole-in-the-wall.”

Outcome based contracts, pay for effectiveness (availability, readiness or other related performance measures) at a fixed rate, penalize performance shortcomings, and/or award gains beyond target goals.

Before providing background on relevant outcome-based contracts, it is useful to clearly distinguish outcome-based contracts from other common contract mechanisms that are applied to the support of products and systems (Table 1).

Performance contracts are not warranties, lease agreements or maintenance contracts, which are all break-fix guarantees. Rather these contracts are quantified “satisfaction guaranteed” contracts where “satisfaction” is a combination of outcomes received from the product, usually articulated as a time (e.g., operational availability, readiness), usage measure (e.g., miles), or an energy-based availability.

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<sup>10</sup> See Chandler’s article “Managing for Meaningful Outcomes”; PM World Journal; Vol. VIII, Issue VII; August 2019

<b>Table 1</b>			
<b>Common Contract Guarantee Forms</b>			
<b>Contract Guarantee Type</b>	<b>Examples</b>	<b>Characteristics</b>	<b>Contracted Party Commitment</b>
<b>Break-fix</b>	Traditional warranty	Guaranty defined and limited in scope and time	Repair or replace whole or part of covered product
	Lease		Re-perform covered service
	Maintenance contract		
<b>Satisfaction</b>	Warranty	Satisfaction not “quantifiable” but may be limited in scope or time	Replace, repair or re-perform if not satisfied with product or service
	Lease		
<b>Outcome</b>	Outcome based contract (OBC)	Satisfaction quantified	Provider strategy and execution practices define approach to achieving outcomes
	Outcome based agreement (OBA)	Completion to a defined performance state (outcome delivery; closure and cleanup)	
	Public Private Partnerships	Desired “effectiveness” confirmed	
	Other forms such as performance based logistics (PBL) outcome-based logistics; performance contracting;		

	availability contracting; contract for availability” (CfA); performance-based service acquisition (PBSA); performance-based contracting (PBC); PPA or Energy Performance Contract		
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“Outcome-based” contracting originated, because in many cases customers with high availability requirements are interested in buying the availability of a system, instead of actually buying the system itself. In this class of contract, the customer pays for the delivered outcome, instead of paying for specific logistics activities, system reliability management, or other tasks.

Public-private partnerships (PPPs) have been used to fund and support civil infrastructure projects, most commonly highways in the United States, however, other projects including: buildings (e.g., schools, hospitals, high-density housing), bridges, tunnels, and water control projects have also been constructed and supported under PPPs. Availability payment models for civil infrastructure PPPs require the private sector to take responsibility for designing, building, financing, operating, and maintaining an asset. Under the “availability payment” concept, once the asset is available for use, the private sector begins receiving an annual payment for a contracted number of years based on meeting performance requirements. The challenge in PPPs is to determine a payment plan (cost and timeline) that protects the public interest, i.e., does not overpay the private sector; but also, minimizes the risk that the asset will become unsupported.

A concession form of PPP also transfers demand risk to the private partner.

A Power Purchase Agreement (PPA) also called Energy Performance Contracting (EPC) is defined as a long-term contract to buy electricity from a power plant. PPAs secure the payment stream for a power producer and satisfy the purchaser’s (often governmental) regulations/requirements for long-term electricity generation. A PPA defines a fixed price at which electricity is sold with optional annual escalation and a variety of time-of-delivery

factors. The important parameters that are addressed in PPAs include:

- levelized cost of energy (with/without governmental incentives)
- length of the agreement
- internal rate of return
- net present value
- milestones

Each of these parameters may be affected by other factors throughout a project.

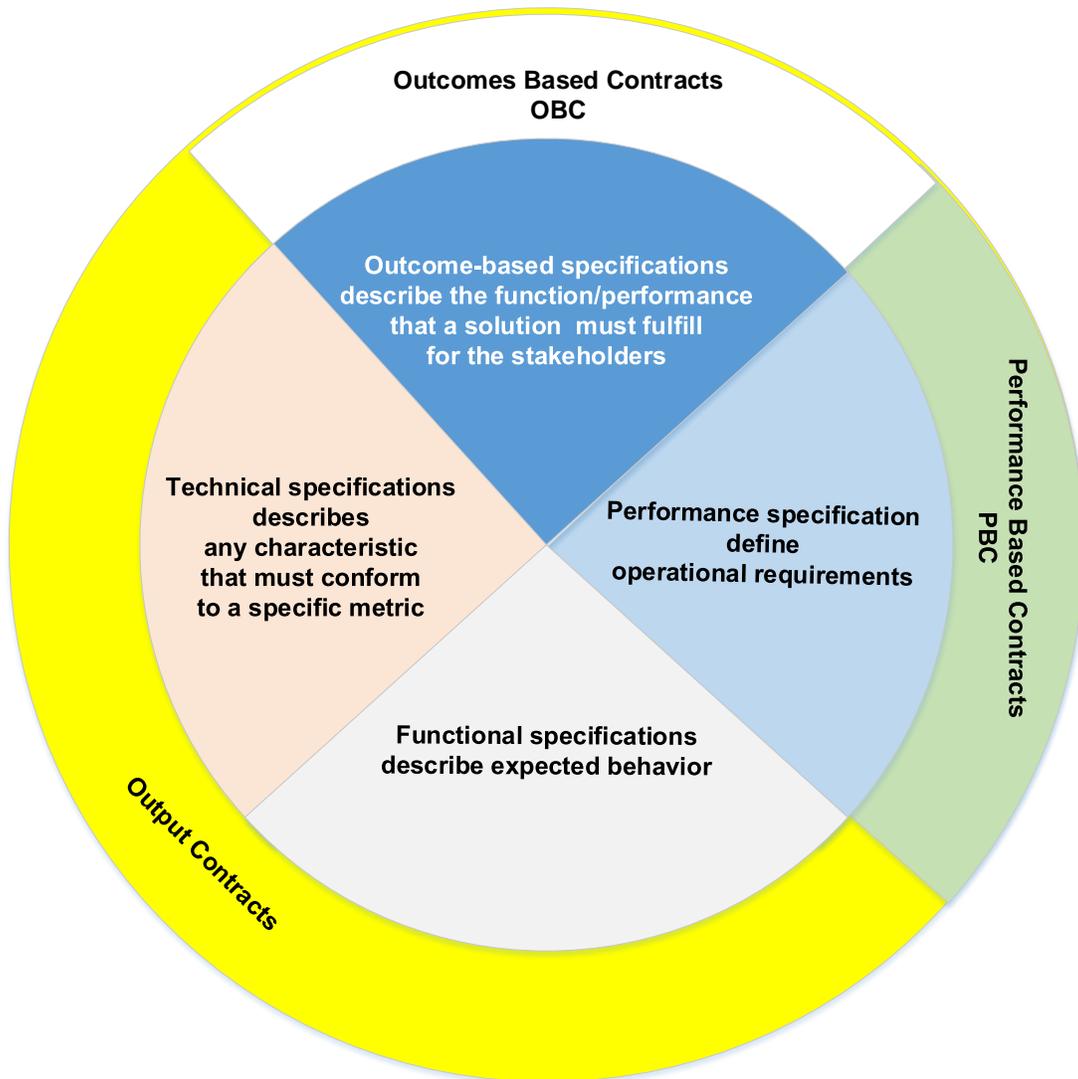
### **Other Outcome Based Contract definitions**

#### *Queensland, Australia*

The Queensland Procurement Policy (QPP) encourages outcome based contracting. For Queensland:

- outcome-based procurement seeks innovation from the supply market by focusing on the agency outcome required rather than defining how the outcome should be achieved.

Using outcome-based specifications, this approach allows suppliers to propose innovative solutions that may otherwise be excluded from a conventional tender process. The following figure demonstrates the relationship between outcome-based specifications, performance-based specifications and the technical and functional specifications more traditionally associated with output based contracts.



### Healthcare

In healthcare, outcomes-based contracts (OBCs), a type of risk-sharing arrangement (RSA), have emerged as a promising avenue. Under OBC's:

- Payers engage with manufacturers in linking value-based payments (i.e., reimbursement and rebates) with real-world outcomes.

Italy was at the forefront of OBC activity at the national level, closely followed by Spain and Germany.

### *Social Services*

Social impact bonds or Pay for Success contracts are a form of PBC that explicitly focuses on outcome achievement and almost always tie 100 percent of government payments to outcomes. They differ from traditional PBC in that private investors provide upfront capital to service providers. The private investors, often a combination of senior and subordinate investors, are repaid by an outcome funder (usually government) contingent on outcome achievement. The idea of social impact bonds originated in the United Kingdom in 2010. The aim of the first social impact bond was to reduce the high rates of prison recidivism among short-term male prisoners. In 2012, this model came to the shores of the United States at the Rikers Island jail in New York City. Since then, there have been an additional Pay for Success transactions introduced across the country for a range of social issues, including child welfare, homelessness, and early childhood education.

The expansion of Pay for Success has been supported by several pieces of federal and state legislation. At the federal level, for example, appropriations bills from 2013 to 2016 authorize the U.S. Department of Labor, U.S. Department of Justice, and Corporation for National and Community Service (CNCS) to provide outcome funding for Pay for Success. In 2015, the Social Impact Partnership Acts were introduced in the U.S. House of Representatives and Senate as the Social Impact Partnerships to Pay for Results Act. Additionally, at least 18 states have passed legislation specific to the use of social impact bonds.

### *Security*

All Singaporean government agencies are required to adopt outcome-based security contracts which specify exactly what the agency hopes to achieve by May 1, 2020.

### *Environmental Restoration*

Louisiana will use an outcomes based pay-for-performance model for its coastal restoration project.

## **Comparison with Other Contract Types**

It is important to distinguish outcomes contracts from two other contract types. First and foremost are the more traditional output type contracts. This is best done by a simple comparison which is shown in Table 2.

<b>Table 2</b>		
<b>Comparison of Outcome and Output Based Contracts</b>		
<b>Example</b>	<b>Output-based contract</b>	<b>Outcome-based contract</b>
Improve traffic flow on a highway	Design and construct additional highway lanes	Increase highway capacity by designing, constructing, operating, maintaining and financing the addition of High Occupancy Toll (HOT) lanes meeting broad performance standards
Modernize a “widget” manufacturing control system to increase throughput	Successful delivery of a new, modern manufacturing control system	Number of correctly manufactured widgets in a defined timeframe equal to or greater than target throughput
Establish a human resources self-service environment	Application support and maintenance to agreed service targets	Number of employees using the newly established services
Improved IT managed service for an engineering company	IT infrastructure operating within a service level agreement	No engineering delays caused by problems with the IT infrastructure delaying engineering activities such as calculation, design, review BIM modeling
The installation of a sales and marketing application	The delivery of the application within time, budget and performance parameters	Number of qualified leads generated
The outsourcing of a website for online ticket sales	The delivery of a website that is operational and fully supported 24x7	Number of tickets sold through the website

Access to safe drinking water	Delivery of hand water pumps for wells	Number of people receiving water from working hand water pumps
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The second contract type to contrast outcome based contracts with are performance based contracts which are discussed in the following section.

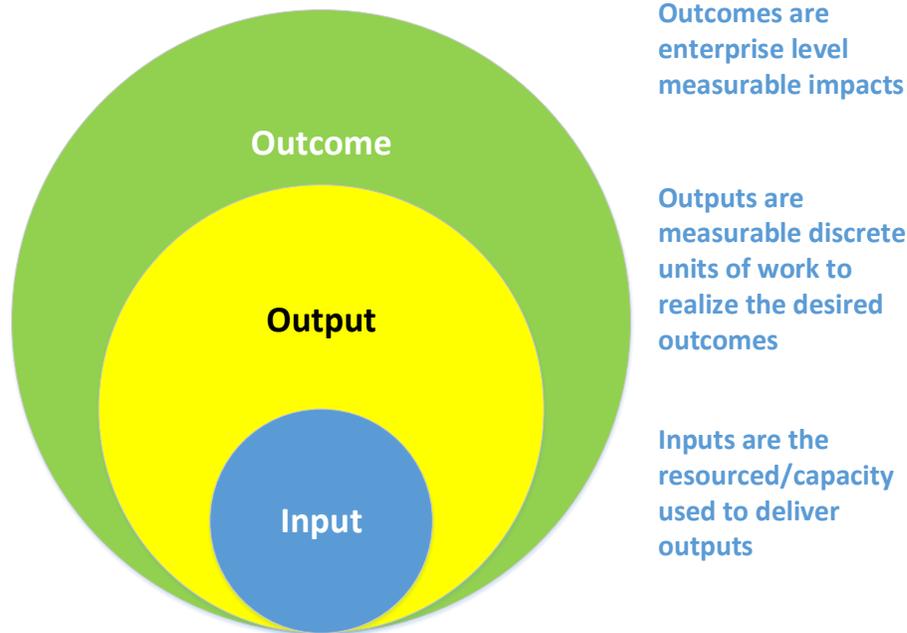
### Outcome vs Performance Based Contracts

At one level one might ask the question as to whether outcomes based contracts are merely a subset of performance based contracts or whether the converse is true. The answer depends on which industry and which country you are viewing the question from and the perspective has been debated for years. Outcomes based contracting got its legs to a high degree in the US defense industry in the 1960s with major weapons systems acquisitions. It then found a ready home in defense industries in the UK and Australia where its use was expanded ultimately into IT, infrastructure (PPP/PFI), healthcare and other social programs, being exported back into the US in some form in each of these industries.

Private sector adoption includes various pay for performance schemes but also energy and water services to major industrial users, moving fixed assets off balance sheet in the process. An often-cited example of an outcome based contract is the Rolls Royce jet engine contract where availability floors ensure minimum performance levels while actual compensation for the purchase and servicing of the engines are based on actual engine usage hours. Rolls Royce is incentivized to maximize reliability and availability by enhancing design and maintainability. Here the outcome of reliable, high performing jet engines (customer focus) is met with an outcomes focus that benefits Roll Royce economically through continuous improvement.

In the public sector space, Public Private Partnerships for transportation projects may reflect either availability type outcomes or economic type outcomes dependent on the PPP model used. On the Tappan Zee replacement bridge an outcome requirement to accommodate future transit was met in an innovative and more cost-effective way than originally envisioned by the owner. And, finally on the Capital Beltway HOT Lanes, the innovation created by an outcomes focused PPP approach, reduced property takes by almost 300 and overall cost by \$1 billion.

The relationship between outcomes based contracts can be viewed in a couple different ways. In the following figure the difference between outcome and output type contracts is highlighted.

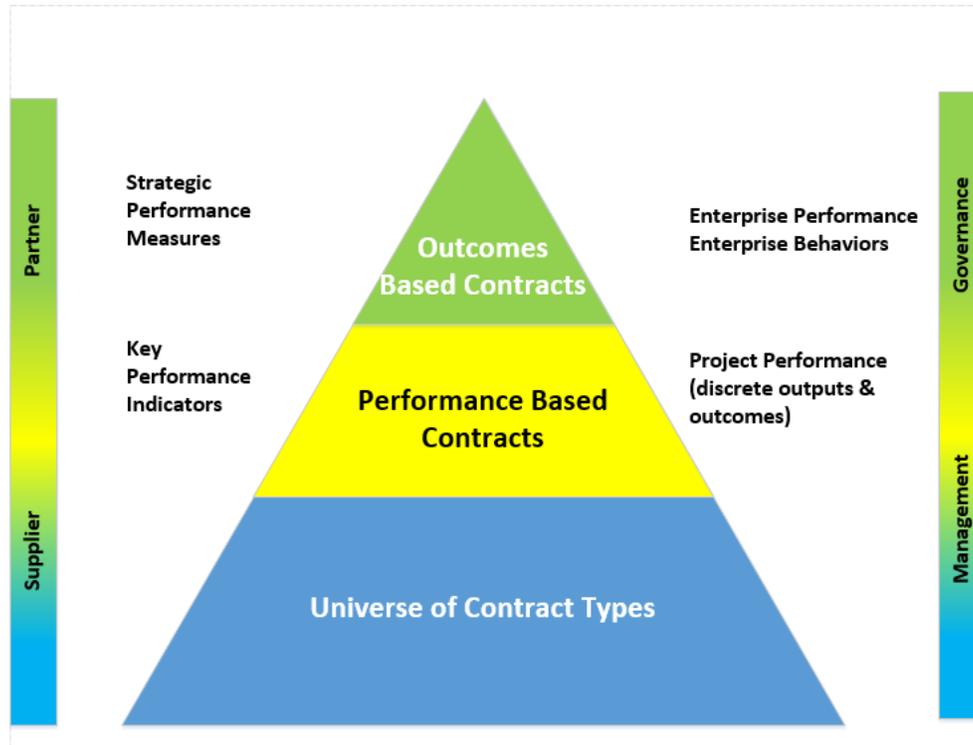


Outcome type contracts are focused on achieving enterprise level measurable impacts. Many of the large complex programs I have worked on were focused on transforming, in a significant way, a given enterprise or a significant element or dimension of it. The goal was achieving the outcome. The projects comprising the program and their composition were fungible and secondary to achieving the overall outcome. Failing to clearly articulate these outcomes, get agreement on them and continuously communicate them was the number one reason such programs underperform.

By contrast output type contracts, which may either be performance based or not, are focused on measurable, discrete pieces of work that must be accomplished in order to realize the enterprise level transformational outcomes. The projects in the program if you will.

Input contracts fall further down the supply chain in many instances and can take a variety of fixed price and reimbursable forms.

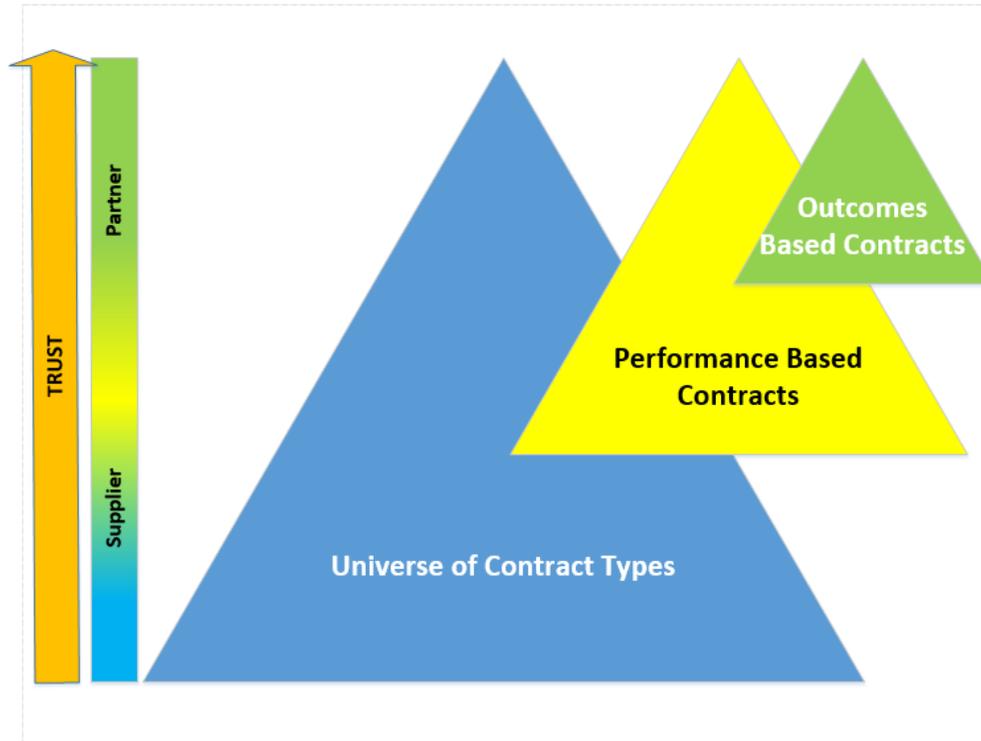
The next figure shows a hierarchy of contract types highlighting the performance focus and performance measures for outcome based contracts and performance based contracts. Again, arguably either could be seen as a subset of the other but the difference in performance focus is the essential item.



As we move towards the apex of the pyramid the nature of the contracting relationship shifts from a transactional supplier to an allied and aligned partner. Similarly, as we move towards outcomes based contracts, management of the projects and contracts must increasingly incorporate a governance dimension<sup>11</sup>.

The hierarchy of contract types, from one perspective can look at these three broad groupings as increasingly higher order subsets of another. This can be seen when we “explode” the last figure apart.

<sup>11</sup> ISO 21502 Project and Programme Portfolio Management addresses governance of portfolios. Governance of portfolios/programs consists of the principles by which a portfolio/program is authorized and directed. Governance provides the policies, authorities, processes, procedures, standards and accountability necessary to conduct the management and leadership of the portfolio/program. Portfolio/program management is undertaken within the boundaries established by the governance



As we move to a more strategic, programmatic focus, trust becomes an essential element together with the strengthened governance requirements previously flagged.

### Aligning for Success

The engineering and construction industry has always faced challenges on alignment of interests of multiple parties in project delivery. Among the challenges are risk allocation and sharing. Traditional contract mechanisms are often focused on risk transfer, not always to the best party to mitigate risks. This situation is often exacerbated through multi-party contracting strategies which introduce new levels of delivery complexity and growing “white space” risks.

The utilization of “outcomes” aligned, shared incentive teams for the delivery of large complex projects holds promise in improving project outcomes.

Over the years this has been addressed through a number of effective alignment strategies and insights that should guide current contracting approaches for large capital projects. This can be best illustrated through some examples:

#### *Example #1 – Aligned incentives*

In the late 1990’s a 15,500 mile nationwide telecom fiber network was rolled out. The

program manager was responsible for acquisition and integration of owner provided equipment and designing and building the network within an accelerated time frame. The design engineer provided engineering services to the client's program manager for the planning, design, and construction of a 15,500-mile (24,900-kilometer) coast-to-coast fiber optic communications network using "IP" Internet Protocol technology. The major elements of the services included environmental compliance/permitting, right-of-way identification and facility site acquisition, design of the running line and facilities sites, quality assurance, and program management support. Additional services included development and implementation of a project web site to manage the project, geographic information system support, surveying, mapping, and geotechnical and hydrogeological engineering.

The constructor was responsible for integration of the owner provided equipment into the overall facility to deliver a functioning network.

The owner wanted to ensure all parties were aligned for the benefit of the project. In order to achieve this each contract (designer and constructor) consisted of three parts. First a cost reimbursable portion which provided unit rates for items not readily quantified up front. Second, a fixed fee based on an estimated cost of services (design and construction respectively) which incorporated an agreed to level of cost contingency. This fixed fee would not change whether some, all or none of the cost contingency was used (profit unaffected). Third, an incentive component which was based on two considerations. These considerations included the portion of fixed fee put at risk and the aligning metrics to be used to determine the incentive amounts.

All parties agreed to placing 100% of the fixed fee at risk (this only occurred after the cost and fixed fee negotiations were complete) against three shared metrics that would provide a score of 0 – 100. The fixed fee amount was associate with a score of 50 and each party had the potential to lose all of their fixed fee or double it. The metrics for both the designer and constructor were the same recognizing that one's performance directly affected the other.

Evidence that the approach worked is exemplified by the final score of 93!

### *Example #2 Sharing Contingency for Result*

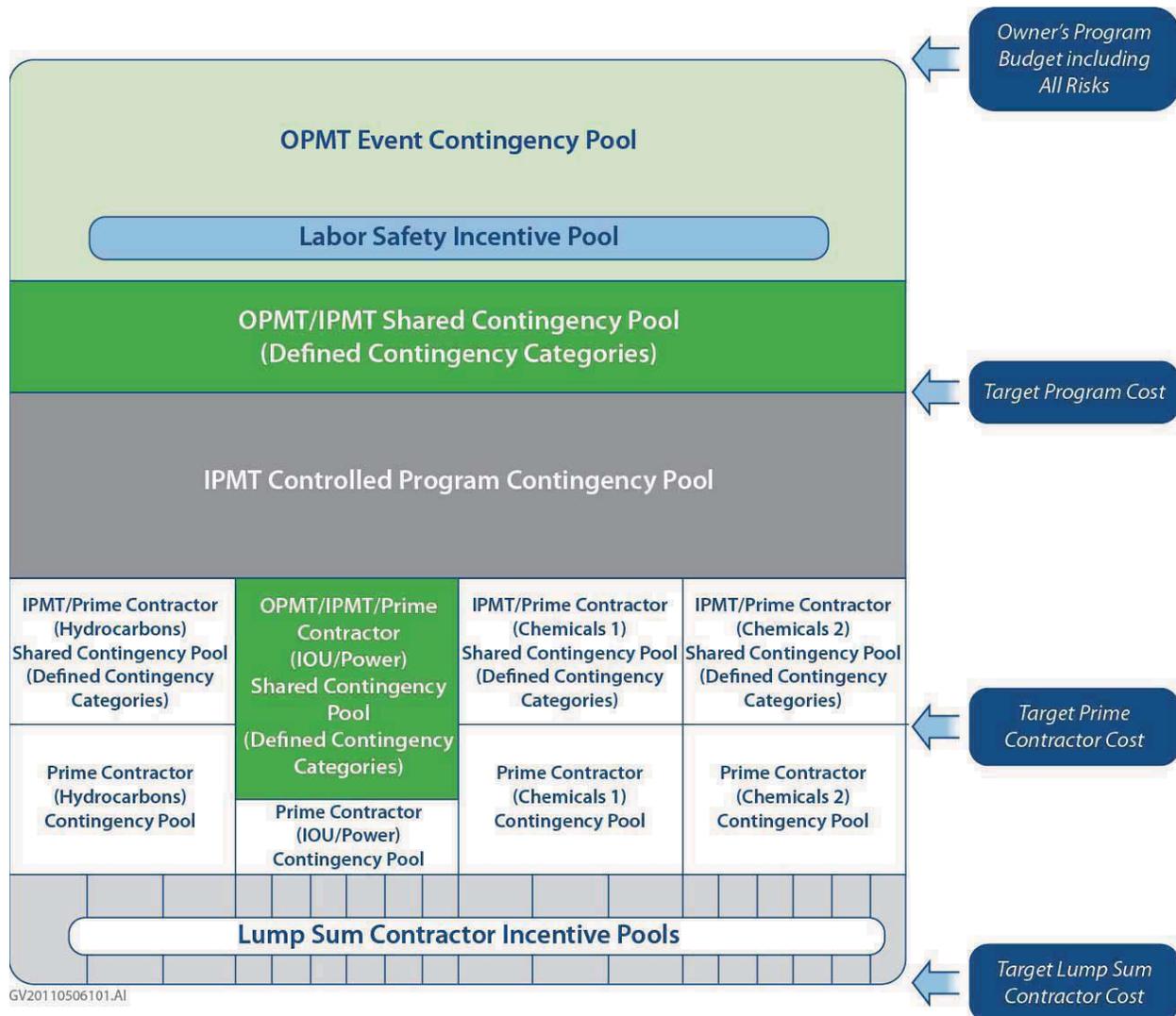
In one "giga" program development effort, a tiered shared contingency approach was developed that ensures that risks that do not squarely fit into one "box" for management by a single party but rather straddle two contracting levels or organizations are adequately managed for shared success.

The recommended commercial approach is based on:

- balance between risk and incentives
- shared approach to sharing of saved contingencies
- overlapping contingency pools between organizational levels to promote achievement of broader program objectives.
- multi-factor contingency pools to promote balanced achievement of program objectives

Simply put, the approach attempts to “fill in” much of the “white space” between boxes to ensure that the risks that lurk in between well-defined contract packages (and inherently are retained by the owner) are squeezed out to the extent possible. It seeks to support outcome achievement.

“Giga” programs carry risks well beyond those encountered on mega programs because on the non-linear increase in scale and complexity risks. The tiered contingency pools provide for augmented risk management, recognize that a greater percentage of risks require the efforts of one or more parties and reduce the number of risks totally within the owner’s purview, allowing appropriate risk management to be focused on the remaining retained risks.



### Example #3 Alliance Based Contracts

Alliance based contracts got their start in the early 1990's with BP's efforts to improve the delivery of offshore oil and gas projects. Subsequently they have been used by a number of private sector global players finding their way into defense and other government agencies and ultimately into the infrastructure sector. This later usage has been primarily in the UK and Australia with growing interest in Canada. While there are many unique features of alliance-based contracts one key feature is the shift from throughput-based profit making towards efficiency-based profit making.

Efforts in the Australian defense sector warrant special attention with use of a contracting model referred to as Generation 3 Performance Based Contracts (PBCs) (hybrid PBC or

Outcomes-based) by the Australian Department of Defence. These models included enterprise performance and behaviors in the performance management framework, more tightly linking to agency outcomes. Like all alliance contracts there is a strong outcomes focus (not just outputs) and the importance of the relational importance in successful alliance contracts is more fully recognized. (See the first figure in this paper)

London used Integrated Project Insurance Programs for Heathrow Terminal 5 and Crossrail, while Australia employs alliance contracting — both of which have shown to reduce costs and delay.

One Australian example can be seen in Melbourne which like other local governments has adopted alliance contracting for many transportation capital projects. The core elements of alliance contracting are: “the collective assumption of risks by the alliance participants; best-for-project decision-making processes; a no fault–no blame culture; and a joint management structure.”

Alliance contracts have been increasingly employed in Australia for smaller capital projects, such as bridge replacements and roadway repair, and have been used recently for rail projects. In 2013, Trackstar Alliance completed an 8.5-mile rail line from Richland to Springfield, south of Brisbane. A single project team, Trackstar Alliance made up of staff from Queensland Rail, engineering and design consultants, and construction firms, completing the project three weeks earlier than the original time line. Overall cost savings were \$221 million, with \$171 million in savings from the alliance contract bid coming in below the Queensland government’s budget and an additional \$50 million saved during construction and design. The project’s full design was completed in less than a year and construction spanned two years. The combination of sharing project risks equally and the no fault-no blame culture among the alliance partners has resulted in few post-project damage claims or litigation.

#### *Example #4 Sellafield*

Sellafield is the UK’s first plutonium plant that is the subject of an ongoing, generational cleanup effort. The contracting approach to cleanup is founded on outcome based contracting (OBC) built on four key cornerstones excellently described by Bew<sup>12</sup> in a four blog series.<sup>13</sup> These cornerstones include:

- Shared purpose
- Aligned outcomes
- One team approach
- Right roles

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<sup>12</sup> Katherine Bew, Managing Director; PCSG

<sup>13</sup> Outcome Based Contracting at Sellafield; Major Projects Knowledge Hub; Jonathan Norman; 2019

Culture, behaviors and alignment are essential.

Outcomes are associated with the delivery of real value not outputs.

An initial pilot project has demonstrated the value of this outcomes focused approach. The outcomes driven delivery approach is focused on decision making to deliver best value in achieving the outcomes through cost-effective risk sharing.

### **Things to Pay Attention To**

Alliance arrangements, a form of outcomes based agreements, have three core principles:

- All agreements are between two or more firms that make ongoing resource contributions to create joint value (including technology, staff, capital and equipment)
- All agreements are considered to be an “incomplete contract”, a phrase that refers to an agreement in which the terms cannot be completely specified and agreed at the outset
- All alliances share joint decision making to manage the business and share the value.

Alliance contracts have the potential of delivering many benefits but careful attention must be paid to their design, implementation and oversight. In particular:

- Appropriateness of project characteristics must be confirmed
- Alliance elements carefully considered and reviewed for completeness (ensure that alliance partners can truly influence the outcomes)
- Delineation of the success factors ensuring that they are:
  - Linked to a well articulate strategic outcome statement, that has been agreed to and is continuously communicated and reinforced not just by words but also by actions
  - That a vital few, outcome oriented metrics have been chosen to measure alliance performance, recognizing that these will likely differ from traditional output measures
- Ensuring that scope is well developed and bounded with a performance based orientation and a comprehensive, expanded basis of design
- Confirming the required behaviors for success are present and strengthening
- Engaged executive leadership from all the alliance partners, acting unanimously on all key appointments and decisions
- Independent advice to the executive leadership team acting to suggest and

challenge as well as assess the effectiveness of this team

## **Summary**

This paper looks at outcomes based contracts and how they differ from more traditional output based contracts. It further looks at some examples from outside the US context and the engineering and construction industry (outcomes based contracting can be seen in many sectors - IT, health and various social services). A few of the possible outcome alignment and incentive approaches that are available and represent forms of output aligned agreements are presented. Other forms of outcome based agreements are possible (Public Private Partnerships and Alliances represent two examples).

Alignment at the strategic business outcome level is essential for large complex project success and outcomes based contracts offer a way forward.

## About the Author



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**Bob Prieto** is a senior executive effective in shaping and executing business strategy and a recognized leader within the infrastructure, engineering and construction industries. Currently Bob heads his own management consulting practice, Strategic Program Management LLC. He previously served as a senior vice president of Fluor, one of the largest engineering and construction companies in the world. He focuses on the development and delivery of large, complex projects worldwide and consults with owners across all market sectors in the development of programmatic delivery strategies. He is author of nine books including “Strategic Program Management”, “The Giga Factor: Program Management in the Engineering and Construction Industry”, “Application of Life Cycle Analysis in the Capital Assets Industry”, “Capital Efficiency: Pull All the Levers” and, most recently, “Theory of Management of Large Complex Projects” published by the Construction Management Association of America (CMAA) as well as over 700 other papers and presentations.

Bob is an Independent Member of the Shareholder Committee of Mott MacDonald. He is a member of the ASCE Industry Leaders Council, National Academy of Construction, a Fellow of the Construction Management Association of America and member of several university departmental and campus advisory boards. Bob served until 2006 as a U.S. presidential appointee to the Asia Pacific Economic Cooperation (APEC) Business Advisory Council (ABAC), working with U.S. and Asia-Pacific business leaders to shape the framework for trade and economic growth. He had previously served as both as Chairman of the Engineering and Construction Governors of the World Economic Forum and co-chair of the infrastructure task force formed after September 11th by the New York City Chamber of Commerce. Previously, he served as Chairman at Parsons Brinckerhoff (PB) and a non-executive director of Cardno (ASX)

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