Service Procurement Selection Methodology

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Abstract Governments play a significant role in the water industry in all countries, either as a direct service provider, a procurer of services, or as a regulator.

The way in which traditional government monopoly agencies affect the market is changing and a greater depth in the private sector infrastructure and services delivery market is appearing in many parts of the world. Additionally, the commercialisation of government water businesses has seen a number of these competing in the general market to supply services in competition with private sector companies.

Parallelling this change has been the emergence of a number of alternatives to the more traditional contractual methods for procuring infrastructure and service delivery. A client organisation looking to contract out services is faced with a plethora of contract options. It is a daunting task to select the most appropriate option, particularly when faced with the often competing objectives of internal stakeholders.

The S2M model presented in the paper provides a methodology to achieve best-value operations and maintenance service delivery in the water industry. The model uses objectives based selection, balancing the priorities of the various stakeholders, in order to select the most appropriate contract form for the organization as a whole.

Keywords Service Selection, Operations & Maintenance, Contracting Out, Alliances, Objectives Based Selection, S2M, Prioritisation.

Introduction

The S2M Model is structured to allow the selection of a preferred service delivery approach based on achieving the (usually competing or conflicting) objectives of the client organisation. This approach recognises that the best outcome for a client will logically be achieved by focusing on the desired outcomes for service delivery rather than the immediate issues surrounding it.

This ‘service objectives’ methodology allows all relevant services-specific issues as well as numerous corporate agendas to be considered with equal intensity in the decision-making process. That is, rather than seeking to allocate responsibilities between purchaser and provider on the basis of which party is best able to bear them, the approach taken is to evaluate what the purchaser hopes to achieve by the purchase, both in the delivery of the services and as its final outcomes, and to assess in a holistic fashion how each alternative service delivery method might be likely to ensure those objectives are achieved. This approach is essentially one of comparison, a method that identifies what is wanted, and then compares all the available alternatives to assess which one provides the best solution.

This approach is particularly suited to the delivery of services likely to be subject to a wide range of corporate pressures for non-technical outcomes.

The model emulates the classical business management approach of achieving desired goals; selecting the most appropriate delivery strategy only when the purchasing objectives for the services are thoroughly understood. When the purchaser clearly understands these needs, then a rational decision can be made as to the delivery method most likely to ensure that the client's needs are achieved. In effect, the model:

- seeks to establish the needs of the purchaser, then
- establishes the core issues driving the decision-making process, and then
- compares how each of the available service delivery contract methods is likely to fit the purchaser's needs.

As simple as the above explanation may seem, identifying (through the application of the model), the real balance of corporate and service delivery drivers behind the project purchasing criteria is the key feature of the process.

The model has been developed for the water industry, but has equal application (with modification) to any industry where the provision of operations and/or maintenance services is required.

Principles of the S2M Model

The S2M Model is a decision-making tool that provides a clear, rational, repeatable process useable by both executive and elected officers of a client organisation to determine the most suitable form of contract, or delivery method, for the delivery of operations and maintenance services, including infrastructure provision as part of those services.

The "Corporate Agenda" positions that typically arise from an incomplete appreciation of the key service issues are neutralised by a process that gives equal consideration to all issues before establishing the critical decision making issues. This approach allows all issues to be considered holistically, with no issue placing an untoward or inappropriate emphasis in the choice of delivery model.

Using the S2M Model

The options for service delivery can be represented on a spectrum of private sector involvement, with full Client delivery on the left and full privatisation on the right, as represented by Figure 1 below.

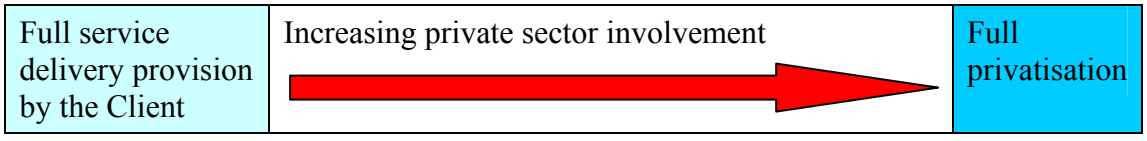

Figure 1 – Spectrum of Private Sector Involvement

In selecting a contract option for the delivery of the services there are two fundamental approaches:

- options that incorporate a change in the asset ownership structure; and

- options that simply change the mechanism for service delivery, without effecting asset ownership.

The contract forms that the **S2M Model** can currently be applied to and a brief description of those contract forms are as follows:

- **Specialist support for in-house implementation:**
  The client organisation seeks to implement an improvement programme which it manages with staff from its own resources, with specialist support provided by one or more private sector entities, typically providing services in non-executive roles.

- **Insourcing alliance contracts:**
  The client organisation extends its capability by incorporating the Alliance Contractor's personnel within it's organisation (joint organisation chart) to enhance a range of it's activities, such as design, operation and maintenance and/or infrastructure delivery., The alliance contract works by the sharing of risks and rewards (including cost outcomes). Remuneration is based on jointly developed targets and goals, with cost recovery not at risk and overheads and profits at risk through shared benefits or losses. The client organisation typically finances working and investment capital. Alliance contracts for service provision typically extend 5 to 15 years.

- **Outsourcing alliance contracts:**
  The client organisation transfers responsibility for the management of a full range of activities within a specific field, such as operation and maintenance to an external "Alliance" of the authority and a contractor. Remuneration is based on jointly developed targets and goals, with cost recovery not at risk and overheads and profits at risk through shared benefits or losses. The client organisation typically finances working and investment capital. Alliance contracts for service provision typically extend 5 to 15 years.

- **Management contracts:**
  Under management contracts, the client organisation passes management and operational control of an enterprise to an unrelated manager for an agreed period. The simplest management contracts pay a private operator a fixed fee for performing managerial tasks. Other management contracts offer greater incentives for efficiency by defining performance targets and basing the fee in part on their fulfilment. Under many management contracts, the client organisation employs the staff with the exception of a few top managers. Management contracts usually have terms ranging from three to five years, although they can be longer and are often renewable. Under a management contract, the client organisation retains full ownership and is responsible for capital expenditures, maintenance, and working capital, while the manager supplies only management and technical skills.

- **Short term O&M services contracts:**
  The client organisation contracts out specific services or elements of infrastructure operation and maintenance to a private sector entity. The contracted operator is set clear objectives and performance targets, relating to the objectives of the improvement programme, to be achieved annually and within the contract period. Remuneration may be on a cost-plus, lump-sum, or unit costs basis, on a time basis or percentage or proportional to some physical parameter. The client organisation retains overall responsibility for the system, except for the specific services contracted out, and it finances working capital and fixed assets. Control is exercised through setting performance indicators, detailed performance specifications and procedures for monitoring quality, evaluating bidders, supervising contractors, applying contract sanctions, paying an agreed fee for the services, etc. Contract terms are typically three to five years.

- **Long term O&M services contracts:**
  Long term services contracts are usually broader in scope than short term contracts, and tend to focus much more on system operation than maintenance provision alone. They usually cover complete system operation and maintenance, and can also include capital programme development/delivery, IT services, revenue services and the like. Remuneration may be on a lump-sum, or unit costs basis, on a time basis or percentage or proportional to some physical parameter. The fees may be directly linked to operational efficiency or cost control. The Operator bears the commercial risk for service provision. Long term service contracts typically have terms of 10 years duration or longer. Duration is particularly important for services which require substantial initial investment, for example, where specialised equipment must be bought.

- **Leases:**
  Under a lease contract a private sector operator takes over complete control of all aspects of the water and/or sewerage service - retail distribution or bulk supply, or both. The contracted operator is responsible for all expenses associated with the management of the service and operation and maintenance of its assets as well as controlling the revenue stream. The contractor is not responsible for financing investment. The contracted operator is set clear objectives and performance targets for the service as well as those relating to the objectives of the improvement programme. However, ownership of the service assets remains with the client organisation and the operator executes capital works programmes funded by the client. The operator effectively buys the right to the revenue stream and thus shares significant commercial risks. Leases are typically long term with durations in excess of 10 years.

- **Concessions:**
  Under a concession contract, the client organisation grants to a private company an exclusive right to operate and maintain the whole system or self-contained parts thereof for a specified period. A concession contract transfers the responsibility for financing major investments to the contractor. This implies that all commercial risks and most financial risks are shifted to the contractor. A concession contract may or may not transfer ownership of facilities to the contractor. In either case, the contractor must return the facilities in good condition at the end of the contract period. The client organisation maintains control over service provision by reviewing investment plans and their implementation, monitoring service quality, and regulating tariffs. Concessions are substantial in scope (usually a whole city or region). Concession

contracts are designed to be long enough to allow the concessionaire to depreciate investment and to provide a reasonable return to the equity investors, typically from 15 to 30 years.

- **Full divestiture:**
  Under a full divestiture model, ownership of the client organisation or the assets of that organisation are sold to a private entity. The private entity then operates and maintains those assets and provides services under a regulatory regime. The most commonly used methods of divestiture are the sale of shares, the sale of physical assets, opening a state-owned company to new private investment, and a management or employee buy-out. Because of water and sewerage services essentially represent a natural monopoly, detailed and intrusive government regulation is indispensable to prevent the natural monopoly from exercising its monopoly power.

- **Partial divestiture:**
  As per the full divestiture delivery method above, except that only part of the entity is sold. The client organisation will usually retain a controlling shareholding in the divested business.

How the S2M Model Works

The S2M model works by firstly identifying and prioritising the objectives of the organisation, and then assessing how well each objective is achieved by the contract forms outlined above. The model is run in a workshop attended by all stakeholders. The steps in the process are as follows:

- **Step One: Identify the Purchaser's Objectives**
  The Client's objectives will define the issues that must be satisfied for the client to consider the delivery of services as being successful. By corollary, where an objective is not met, clients tend to regard the delivery of services as unsuccessful. The S2M Model recognises that there are commonly two perspectives associated with the provision of services that define the objectives – a "Corporate & Community" scope and a "Performance & Physical" scope.

  The specific technique around which the S2M Model has been developed for this purpose is the "100 points" approach. It works as follows:

  1. The Client is organised into groups representing different agency functions/ stakeholders (such as executive, finance, engineering, operations, community and the like). The relative weighting of the views of each group is allocated through discussion and consensus.

  2. Each stakeholder group is asked to assign their personal allocation of 100 points each across a range of pre-identified issues, as set out in Table 1. Participants have total freedom to allocate their weighting against any issue as they see fit.

  Through this process the stakeholder groups will have sieved through the entire range of services related issues; arrived at a corporate view as to the client's core objectives regarding delivery of the subject services; and have agreed on the relative significance (weight) of these objectives.

Table 1 – Service Delivery Objectives

REF No	CORPORATE & COMMUNITY SCOPE ISSUES
	ECONOMIC DEVELOPMENT
C1	Manage contracts to give local/regional business opportunities
C2	Ensure local/regional businesses can bid mechanical and/or electrical works
C3	Ensure local/regional engineering consultants can bid asset management
C4	Agency's internal business units can bid contracts competitively
C5	Ensure residual staffing levels are viable
C6	Acquire partner to pursue commercial opportunities elsewhere
	PRINCIPAL'S RISKS
C7	Assets currently failing regulatory requirements and Contractor to take risk
C8	Assets will fail future regulatory requirements and Contractor to take activity risk
C9	Assets will fail future regulatory requirements and Contractor to take investment risk
C10	Contractor to accept or share operational risk
C11	Contractor to accept or share maintenance risk
C12	Contractor to accept or share asset life risk
C13	Contractor to accept or share revenue collection risk
C14	Contractor to accept or share market demand risk
C15	Contractor to accept or share economic/tariff regulatory risk
C16	Contractor to accept or share asset investment risk
	CAPITAL INVESTMENT
C17	Contractor to provide infrastructure rehabilitation/ minor asset creation capability
C18	Contractor to obtain grants and subsidies for the Agency
C19	Contractor to provide major asset creation capability
C20	Contractor to finance infrastructure development for service extensions or service upgrade
C21	Contractor to finance infrastructure development for major works such as new treatment facilities
C22	Contractor to finance all infrastructure renewals
C23	Agency wants to create capital for other projects through sale of infrastructure
C24	Agency wants to avoid capital investment costs
	STAFFING
C25	Ensure no loss of employment for existing staff
C26	Agency to retain direct management control of operations staff
C27	Agency wants to retain O&M backup expertise
C28	Agency wants a third party to carry all HR risks
C29	Agency is unable to obtain skills from market place
C30	Agency wants to retain planning resources
	COMMUNITY
C31	Agency wants to maintain a direct relationship with its community
C32	Stakeholders/community do not favour private sector O&M of the Agency's facilities (only include if attitudes actually known)

C33	Stakeholders/community do not favour private sector ownership (only include if attitudes actually known)
C34	Sufficient regulation and accountability (Government or contractual) to protect consumers
C35	Agency wants to drive agendas such as demand management and abstraction control
C36	Provide higher standards of service
	OTHER
C37	Drive organisational culture to higher performance
C38	Agency wants improved relationships with contractor to obtain better outcomes
C39	The Agency wants to maintain control over service provision and investments
C40	The Agency wants responsibility for operations, maintenance and investments to be with a single entity
REF No	**PERFORMANCE & PHYSICAL SCOPE ISSUES**
	SERVICES COST
P1	Lowest Net Present Value the key financial determinant
P2	Want certainty on service cost after tender award
P3	Place some maintenance cost risk with the service designer
P4	Place consumables risk with the contractor
P5	Ensure that all feasible O&M techniques are available
P6	Ensure that asset value is retained or enhanced through the life of the contract
P7	Services expenditure to be adjusted depending on income
	PRICING
P8	Maintain full control of the pricing for services
P9	Contractor to set prices with prices oversight set by the regulator
	CHANGES IN SCOPE
P10	Maintain flexibility in strategic development of the facility/system
P11	Contractor to share all operations and maintenance risks
P12	Need to commence work before O&M scope is fully defined
P13	Need to maintain flexibility in the performance standards specification
P14	Share the volume risk with the contractor
P15	Scope change risk to be transferred to contractor
	TENURE RISKS
P16	Facility contractor to take or share land ownership risks
	ASSET MANAGEMENT
P17	Agency to have a close control on all or part of asset management
P18	Agency has operations & maintenance skills that will benefit the services design
P19	Access the widest range of technologies
P20	Ensure the best available asset managers are engaged
P21	Particularly focus on innovation in asset management
P22	The agency wants to maintain control over the service standards provided by the

	NETWORK PERFORMANCE
P23	Focus on optimising the performance of the facility or network
P24	Contractor to carry reticulation operational risk
P25	Contractor to carry reticulation maintenance and renewal risk
P26	Manage interface risks with refurbishment/ extension contractors
	TREATMENT PERFORMANCE
P27	Treatment technology to change over life of contract
P28	Contractor to manage catchment
P29	Contractor to carry residual volumes and disposal cost risks
P30	Agency to retain management for effluent disposal/ re-use
P31	Contractor to take risk of raw water quality
P32	Contractor to take risk of treated water quality
	AGENCY MANAGEMENT NEEDS
P33	Certainty of monthly cashflow requirements
P34	Alignment of goals between the contractor and the Agency
P35	Drive non-cost performance measures
P36	Ensure that there is no loss of corporate knowledge
P37	Gain access to improved management systems
P38	Know the detailed cost breakdown for the provision of the services
	AGENCY STAFF INVOLVEMENT
P39	The Agency has particular operations skills to be engaged during the Services Design Phase
P40	The Agency wants some quick wins
	OTHER
P41	The Agency wants to better understand and improve its business processes
P42	The Agency wants to improve its own operational efficiency and cost control
P43	The Agency wants to regularly test the cost effectiveness of the service delivery in the market place
P44	The Agency wants to incorporate a wide range of its business in the contract

- **Step Two: Assess the Possible Services Delivery Strategies**

  The S2M evaluation takes the form of a five point comparative scoring system which rates the relative ability of each of the available delivery methods to meet each objective. From this evaluation, it is possible to identify a narrow range of service delivery methods most likely to deliver a successful services outcome.

  If participants believe that the S2M Model has not produced a model acceptable to the client, then the participants may need to contemplate re-visiting the earlier steps, as one or more issues may not have been fully explored. Having done so, re-scoring the S2M Matrix should then deliver Indicated Preferences that are acceptable to all stakeholders.

The S2M model ranks the performance of each of various contract options in meeting the objectives. An example of the model output is shown in Figure 2 conducted for a Local Government client in Australia.

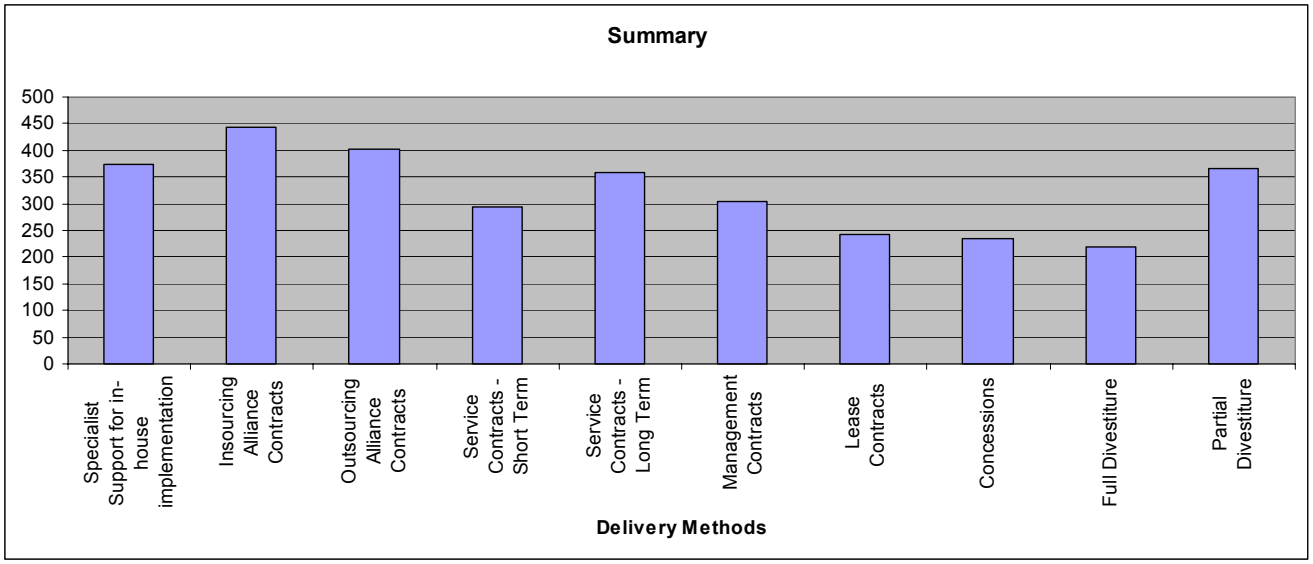

Figure 2 – Example Model Output

- **Step Three: Select & Tailor a Preferred Delivery Strategy**
  The contract or service delivery model which can be most easily and effectively modified by specific 'tactics' in order to make it closely align to the client's objectives will be the best option to adopt – as long as the core service objectives are not compromised. Tailoring the selected delivery strategy by specific focus on the development of service tactics will help to ensure service success by making the strategy (delivery method) respond with maximum effect to the client's specific needs whilst undertaking the services.

Conclusion

The S2M model provides a rigorous, objectives based approach to the selection of contracting strategy for an organisation. It balances the views of competing stakeholders and competing objectives in determining the best approach for the organisation as a whole.