

**PROCUREMENT ISSUES IN PERFORMANCE-BASED CONTRACTS:  
THE WORLD BANK EXPERIENCE WITH  
OUTPUT-BASED AID SUBSIDIES**

Luis Tineo\*

**ABSTRACT.** This paper focuses on the World Bank's emerging experience with a promising application of performance-based contracts: Output-Based Aid (OBA) subsidies. OBA is the provision of subsidies for the delivery of and access to social or infrastructure services. Under OBA, subsidy payments are tied to measurable performing outputs, leaving the specific methods of achieving these outputs to the service provider's discretion. While creating better risk allocation, more value for users and contracting agencies, and fewer opportunities for corruption than traditional methods, OBA schemes raise new procurement issues that need to be reconciled in order to achieve optimal results. An issue this paper explores is the tension between the need that contracts be "expenditure-based" with the "performance-based" nature of OBA subsidies.

**INTRODUCTION**

With almost 3 billion people living on less than \$2 a day, governments in many developing countries have been increasingly pressed to justify whether public funding is producing desired improvements in living conditions. These pressures are particularly evident in the provision of health, education, and infrastructure services, where results often have been disappointing (World Bank, 2005a).

In many of those sectors, government entities are major service providers. For example, the Indonesian government operates more

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\* *Luis Tineo is a Senior Procurement Specialist in the Global Partnership on Output-Based Aid, The World Bank, Washington, D.C. (ltineo@worldbank.org). He specializes in public procurement and contracts related to the provision of infrastructure services in developing countries.*

than 150,000 primary schools and 10,000 secondary schools covering 85 percent and 60 percent of enrollments, respectively. The Indian public sector runs almost 200,000 primary health facilities and 15,000 secondary and tertiary health facilities. The Armenian government is responsible for maintaining approximately 10,000 km of roads. In Ethiopia, the city of Addis Ababa's government manages more than 300,000 water connections (World Bank, 2005b).

Even when the government is not the major service provider, it remains the entity responsible for channeling public funds (whether sourced from taxpayers or international development assistance) to alternative providers under public-private partnerships. In both cases, the majority of government contracts are procured in the traditional, input-based fashion (i.e., either under force account arrangements or individual procurement of labor, materials, physical works, consulting services, and other project components). Enormous amounts of resources are procured without linking funding and service delivery, leading observers to question whether this traditional approach creates proper incentives for efficient performance, and appropriately limits opportunities for corruption.

The search for better results has led the World Bank to encourage countries to progressively substitute traditional input-based contracts with performance-based contracts (Brook & Smith, 2001). The idea is simple: results can be improved by transferring the risk of delivering outputs from the government to the service providers. By focusing on tangible outputs, government agencies' efforts switch from "what work is to be done" (input-based) to "what output it is to be delivered" (performance-based). A technical specification is replaced by a measurable performance standard; a single contract replaces burdensome management of multiple individual contractors and asset inputs; and a lump sum payment is released upon completion of an output. Properly designed, performance-based contracts can lead governments to experience better value from service providers, and ultimately, results.

This paper discusses a promising application of performance-based contracts: Output-Based Aid (OBA) subsidies. OBA is the provision of explicit subsidies to close the gap between the consumer's ability to pay and the cost-recovery tariff the service provider charges for the delivery of basic services.<sup>1</sup> This subsidy is structured as part of a performance-based contract in which subsidy

payments are tied to the delivery of outputs, with the performance risk borne by the provider of the service (i.e., private companies, non-governmental organizations, community-based organizations, and public service providers).<sup>2</sup>

Structuring OBA, however, presents unique procurement challenges, as it requires an approach different from traditional input-based contracts. In order to comply with the criteria that make input-based contracts the preferred option, and to improve upon them, it is necessary that OBA reconciles the public procurement and finance requirement that contracts need to be “expenditure-based” with the “performance-based” nature of these contracts so that subsidy payments to contractors can be linked to outputs actually delivered.

This paper uses the experience of the World Bank to discuss some of the procurement issues involved in designing OBA schemes. The next section discusses the main advantages and applications when switching from input-based to OBA contracts. The last section discusses the scenarios where the tension between expenditure and performance issues arises, and provides solutions.

## **SWITCHING FROM INPUT-BASED TO OBA CONTRACTS**

### **Comparable Benefits**

Subsidies are generally justified for services with the highest difference between the willingness to pay and their costs. In many developing countries, the lack of access to piped water leads the poor to either use contaminated ground water from shallow wells or pay exorbitant fees to water carriers. It has been estimated that poor, unconnected households spend 15% or more of their household income on water provided by independent resellers at extreme cost. In many areas of Indonesia or Ethiopia, for example, these water charges can be equivalent to up to 40 times more than if they received a piped supply from the concessionaires.

The need to increase the attractiveness of extending service access to the poor is clear and suitable for OBA subsidies. The effectiveness of OBA subsidies comes from two procurement mechanisms: competitive pressure in the award and determination of the subsidy level, and a performance driven regime for the payment of the subsidy. Output specification, performance compliance, and payment only upon delivery of services are therefore three elements

that clearly differentiate OBA from traditional, input-based contracts (World Bank, 2004a).<sup>3</sup>

Input-based approaches focus on maximizing individual input value. To achieve this goal, contracting agencies retain full control of the pre-financing and performance risks and costs. Hence, works and services are procured based on two conditions: the bidding documents prescribe detailed specifications as to what exactly is to be done by the contractor and payment is made upon satisfactory physical completion of specified targets or components. The effectiveness of input-based approaches often comes at a high preparation cost.

Since the procurement model is usually provided and managed in-house, agencies structuring input-based approaches spend significant resources specifying techniques, technologies, types and quantities of materials (e.g., cubic meters of asphalt or concrete, number of working hours, materials on the quantity delivered to site), and estimating time period for contract execution. Additional resources go into the procurement process itself (depending upon methods, research of market responsiveness, and allocation of budgetary resources), and into contract management and verification, (e.g., for goods, the payment is made upon delivery and acceptance; for works, initial payments are advanced, followed by progressive payments, and a final retained payment; while for service contracts, it is common to employ an advance payment, sometimes followed by monthly or milestone payments, and a final payment upon acceptance).

In contrast, OBA creates incentives to transfer performance risks further across the value chain, to the contractors.<sup>4</sup> By transferring the risk to the contractors, OBA ensures that the subsidy value is maximized to the benefit of the desired target users (i.e., lower costs enable a greater number of households to be connected for a given subsidy amount). Under OBA, payments essentially finance pre-defined costs consolidated in a given set of outputs, which do not need to be tied directly to an individually procured contract. Performance compliance, on the other hand, promotes new and better ways of achieving the outputs, since service providers bear the risk in case of failure in terms of raising financing, determining appropriate design, specifications and materials, and planning estimated quantities of required inputs.

While procurement methods are important to generate the outputs, specific procurement of inputs are less relevant since the primary payment trigger is the evidence of completed outputs, a stage at which normally contracts have been procured or specified contract tasks have already been completed.

### **Links to Anti-Corruption Efforts**

In addition to the benefits of simplification and flexibility, OBA creates synergies with efforts to reduce corruption, a critical obstacle to achieve poverty reduction and economic development. Comparative indicators developed in World Bank surveys place public procurement among the governance areas most severely prone to corruption in developing countries (Kaufmann, Kraay & Mastruzzi, 2005)..<sup>4</sup>

Over-regulation of private participation in procurement, and excessive discretion given to public officials for the award of contracts, have often bestowed incentives for a range of corruption schemes, which on average add at least 10-20% to the total contract costs (Kaufmann, Kraay & Mastruzzi, 2005). For example, biased specifications, splitting of contract packages to avoid bidding procedures, overuse of shopping or single source procedures on grounds of urgency, unjustified contract amendments, or over or under invoicing, are common practices. The harmful effects of corruption have been found especially severe on the provision of public services, where the poor are supposed to bear the higher cost of public projects and services.

These weaknesses can be effectively addressed under OBA. The limited experience with OBA in developing countries has prevented a comprehensive examination of its effects on lowering corruption. However, even at this early stage, OBA can reasonably be expected to reduce administrative discretion and increase efficiency; two factors associated with corruption. Because procurement and financing decision risks rest on the service provider, contracting agencies procure significantly fewer contracts, and are not required to measure and account for vast quantities of inputs as a basis for payments. Moreover, the disbursement of subsidies upon achievement of outputs means that the service provider has considerable incentives to perform in a cost-efficient manner.

This transfer of responsibilities can allow agencies to manage programs with fewer in-house personnel, and experience fewer cost overruns, schedule delays, and invoicing problems. The cost savings generated by OBA are, of course, still subject to capture by new corrupt practices. Although the service providers in OBA schemes are selected more carefully, it is still important to verify that the outputs have actually been delivered, and that subsidy payments are truly being used to benefit the target users.

OBA schemes can mitigate these problems by devoting a portion of the total subsidy payment to financing more rigorous upstream and downstream safeguards and monitoring mechanisms, such as baseline and follow-up household surveys, audit of procurement processes, and output verification methods. Independent agents can strengthen these safeguards when retained as subsidy administrators, auditors, and technical verifiers of invoiced outputs. User organizations can also provide additional verification functions.

### **OBA Applications in World Bank Projects**

OBA approaches are already being applied in a variety of forms in over 70 World Bank projects. The types of projects vary greatly, including inter alia, output-based management and maintenance of roads, provision of one-time connection subsidies for water and sanitation services, universal access funds for telecommunications services, and voucher schemes for health and education services. The majority of projects are in rural and provincial areas, although several focus on the urban and peri-urban areas.<sup>6</sup>

Payment of OBA subsidies have been tied to (i) number of new connections made, when the goal is to expand access to network services; (ii) verified household consumption, equivalent to the difference between a life-line tariff paid for by the household and the full tariff; (iii) achievement of positive externalities (e.g., subsidies for sanitation disbursed against the achievement of specific environmental targets); or (iv) targeting of disadvantaged groups (i.e., voucher-based support to allow consumers choice of a provider), when the goal is to enhance competition and performance between service providers.

Initial findings of World Bank projects by the Global Partnership on Output-Based Aid shows OBA schemes offer greater efficiency in

service provision, and value for the users. This observation is particularly evident when OBA subsidies have been competitively bid (Table 1). For example, an OBA water scheme in Cambodia, where connections funded by the government through competitive bidding, resulted in connection costs of approximately US\$200 per household, whereas input-based expenditure per household incurred by the government for similar water projects in the past has been closer to US\$500 per household. Similarly, a water scheme in Paraguay has reached connection subsidies at about US\$166 per household, whereas public subsidies for rural water and sanitation schemes have generally amounted to an estimate of about US\$300-400 per household.<sup>7</sup>

Electricity schemes in Mozambique have made more connections to the poor, and provided safer and reliable electricity for US\$600-US\$400 in subsidies per household. Gains have also been made in telecommunications: one of the earlier OBA projects in Nepal resulted in a bid that was 41% lower than expected by the regulator, and a subsidy of US\$69.4 per household. Similar schemes have been replicated elsewhere, and costs have declined: a project to improve on-grid electricity supply on remote islands in the Philippines resulted

**TABLE 1**  
**Competitive Bid Subsidies per Household for Selected OBA Projects**

Sector	Country	Subsidy/Connection for OBA scheme	Subsidy/Connection for non-OBA scheme
Water	Paraguay	\$200-\$276/connection	\$300-\$400/connection
Water	Cambodia	\$200/connection	\$328/\$473 connection
Energy	Bolivia	\$600/connection	\$1,000/connection
Energy	Philippines	\$0.028/kWh = estimated subsidy requirement of US\$ 2.8 million in 2005	\$0.13/kWh = estimated total subsidy requirement of US\$ 9.9 million in 2005
Health	Rwanda	\$3.67 subsidy/patient	\$28.89 subsidy/patient
Health	Cambodia	\$22.7/patient	\$26.9/patient
ICT	Uganda	\$ 3,700/ public payphones	\$12,590/public payphones
ICT	Nepal	\$69.4/household	Lowest bid 49% less than expected

Source: World Bank bidding documents of each project.

in a cost of generation of US\$0.13 per kWh on average and with a total subsidy of US\$2.8 million compared to \$0.23 cost per kWh and US\$9.9 million in subsidies before the OBA project.<sup>8</sup>

OBA subsidies have been useful to rehabilitate and maintain a road network of 190,000 kms in provincial Argentina. Similar contracts have improved maintenance of 6,200 km road network in Chad. These experiences has proven to be very successful in many respects: (i) linking budget allocations with multi-year expenditure requirements established under the contacts; (ii) increasing cost-efficiency as compared to ad-measurement type contracts; (iii) minimizing delays in project implementation; (iv) eliminating cost overruns; (v) reducing the risk of unsatisfactory quality in the rehabilitation and subsequent maintenance works improving the condition of the network; (vi) cutting down the government's supervision costs; and (vii) fostering innovation in the programming and execution of works.

These benefits of OBA are noteworthy. Yet there are design challenges, including the potential fiduciary risks, that confront input-based contracts: the long-standing accountability principle that public resources should be used for the intended purposes.<sup>9</sup> These challenges and solutions for overcoming them are explored in the next section.

#### **RECONCILING "EXPENDITURE-BASED" AND "PERFORMANCE-BASED" REQUIREMENTS IN OBA CONTRACTS**

The principle that public resources should be used for the intended purposes creates a burden on the contracting agency under an OBA contract, as it needs to develop linkages (i) between payments and expenditures – the expenditure-based criteria, and (ii) between such expenditures and their reasonableness, economy, and efficiency – the efficiency criteria. Competitive procurement methods, in practice, have been traditionally used in a majority of countries, and certainly in the World Bank, to meet these two criteria.<sup>10</sup> A bidding process offers explicit cost linkages, and the best mechanism to maximize value, a means of addressing accountability concerns.

In OBA, these linkages are easier to articulate when provision of the service can be delivered by multiple providers. It is more

challenging when there is already a concessionaire in place – an incumbent service provider. Since competitive bidding cannot be applied, robust evaluation methodologies and incentives, together with cost approximation (as opposed to actual cost), need to be applied to allow users to reap the benefits of an OBA contract as much as under competitively bid situations. Figure 1 illustrates the flow of actions in preparing an OBA contract.

### **OBA with Competitive Selection of Service Providers**

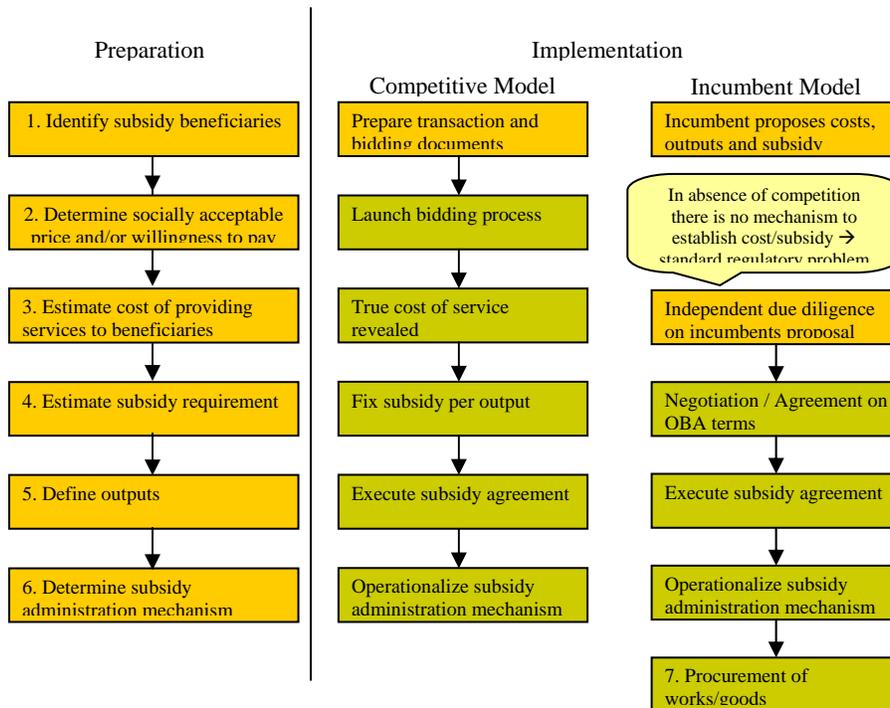
Competitive selection remains the preferred procurement method to comply with the expenditure-based and efficiency requirements for subsidy payments. It can be readily applicable in situations where an OBA subsidy is structured where there is no existing provider.

This has been the most common use of OBA to date, and the most straightforward to implement in a first wave of World Bank's OBA pilot projects, referred as the "greenfield contract" model. Examples of OBA projects where this model is being implemented include water connections for poor households in Cambodia and Paraguay, electricity connections in Mozambique, operation and maintenance of roads in Argentina, and rural telephony access in Nepal.<sup>11</sup>

These projects have been structured following the World Bank's procurement guidelines, which require the award of infrastructure concessions or similar arrangements (with or without OBA components) be based upon International Competitive Bidding (ICB) procedures acceptable to the World Bank, following well-known public procurement principles of economy, efficiency, transparency, and advertisement (World Bank, 2004a, Paragraph 3.13(a)). Some OBA projects are small, often rural pilots involving local participation of communities, NGOs, or regional service providers, and thus better suited for National Competitive Bidding (NCB) using the applicable regulations and bidding documents normally used in the country.<sup>12</sup>

The World Bank's procurement guidelines distinguish the competitive procedures for selection of the service providers from the competitive procedures for the procurement of goods, works, and services by the selected service provider after the OBA contract has been awarded. If the service provider is selected through an ICB or

**FIGURE 1**  
**Flow of Actions in Preparing an OBA Contract**



NCB procedure acceptable to the World Bank, it is free to use its own procedures to procure the goods, works, and services required to produce the outputs (World Bank, 2004, paragraph 3.13).

Irrespective of whether the contracting agency proceeds with ICB or NCB, the selection of the service provider in OBA projects consists generally of three steps: bidding preparation, bidding documents, and bid evaluation and award criteria

***Bidding Preparation***

Prior to developing an invitation for bids, the contracting agency needs to arrange the inventory and collection of data to define:

**Performance Indicators.** The selection and definition of indicators are usually based on (i) user needs, (ii) affordability, and (iii) the level of funding available. The definitions of performance indicators should be specific, measurable, achievable, and verifiable.

**Methodology to Measure Performance Indicators.** The contracting agency needs to determine the methodology which will be applied to measure performance indicators for the service. It should be simple and inexpensive. The provider's performance is usually evaluated at the three levels: management, long-term, and operational. Management performance indicators drive the planning, management and implementation aspects of the contract. They usually incorporate plans for quality, health, safety, and reporting requirements. Long-term performance indicators relate to the overall condition of the service provision, including rehabilitation interventions. Operational performance indicators apply to service ability (i.e., hourly, daily).

**Preliminary Cost Estimates.** The agency needs to prepare preliminary estimates for services to be contracted out. The objective is to obtain a benchmark price for the contract against which bids will be compared later.

### ***Bidding Documents***

Contracting agencies have either adapted existing World Bank standard prequalification and bidding documents or other internationally utilized formats to the particular needs of each project, or designed project specific bidding documents. Two World Bank standard bidding documents in particular have been suitable for OBA projects: The first is the *Sample Bidding Documents for the Procurement of Non-Consultant Services*. This document allows for: (i) advance payment for mobilization; and (ii) progress payments against milestones or percentage of completion of the services, pursuant to performance indicators (World Bank, 2002). The second is the *Sample Bidding Documents for the Procurement of Works and Services under Output-and Performance-based Road Contracts*. This document provides an alternative to the traditional methods of procuring road reconstruction, rehabilitation and maintenance. This document aims to fit the specific nature of Performance-based Management and Maintenance of Roads (PMMR), but it is also suitable for the procurement of works and services under longer-term

“Design-Build-Operate-Maintain (DBOM)” contracts for roads (World Bank, 2005c).

### ***Bid Evaluation and Award Criteria***

Several criteria have been used for selection of service providers under OBA. These are based on: (i) price only or price and non-price criteria; (ii) pre-qualification of bidders or post-qualification; and (iii) whether the winner will be selected based on the “low bid”, highest score for the technical proposal or highest overall score for the both cost and technical proposals. The World Bank guidelines recommend that contracts be awarded to the bidder who meets the appropriate standards of capability and resources and whose bid has been determined to be substantially responsive to the bidding documents, and offer the lowest evaluated cost (World Bank, 2004c). There are various criteria for the award of contracts using OBA schemes. The most commonly used in World Bank projects (Table 2) thus far are least-cost connection bid with a fixed subsidy, lowest subsidy proposal based on a connection or service fee fixed by the contracting agency), and greatest coverage provided with a fixed subsidy.

The World Bank’s practice is to evaluate bid compliance with the requirements established in the bidding documents on a pass-fail basis, and to avoid the use of subjective criteria. Likewise, the award criteria needs to be also objective (e.g., not assign points in the bidding process to aspects in the technical proposal of bidders) as to avoid subjective decision making and the potential of corruption, which may increase the risk of participating in the bidding process.

The advantages of OBA depend on the availability of competitive markets. Competition increases the likelihood that the costs upon which the OBA subsidy is calculated will be efficient. In addition, competitive bidding will implicitly delegate the input-based procurement functions, formerly done by the contracting agency, to the contractor, whose lowest bid proposal for the OBA subsidy will likely reflect best procurement methods for the acquisition of the inputs needed to produce the agreed output. In this case, competition reconciles the conflicts posed by expenditure-based contracting and performance-based subsidies.

**TABLE 2**  
**Sample of OBA Bidding Evaluation Criteria**

Paraguay— Water Project (2003)	Clause 13.1, “Bidding Information”: “Proponents are encouraged to bid for the subsidy per connection, which will be the variable of the bidding process, since the minimum subsidy will be the criteria to select the awarding of the construction of the system. The bidder awarded with the construction of the system will operate the service for a period of 10 years (total), the water supply system, in the localities of Capitán Bado and Mariscal López, designed according to the SENASA design criteria and to be built according to the corresponding technical specifications.”
Bolivia— Cellular Project (2004)	Clause 26.1, “Bidding Information”: “The bidding will be assessed by Groups: La Paz (Group 1), Cochabamba (Group 2), Oruro (Group 3), Potosí (Group 4), Santa Cruz (Group 5), and Chuquisaca and Tarija (Group 6). First, it will be verified that the amount of requested subsidy in the Offers that are presented is not higher than the amount of subsidy offered per each Group, according to Annex ET-5 “Subsidy Amount Offered per each Group,” of Section III—Technical Specifications. In case an Offer for a Group is higher than the amount of the subsidy that is offered, the Financial Proposal for such Group will be disqualified. The following selection criteria will be applied to the offers that match the offered subsidy amount: (a) For those Groups in which there is only one qualified offer, the contract will be awarded to the Bidder that presented such proposal. (b) For each Group in which there is more than one qualified Offer, the winning proposal will be the one that offers the largest amount of inhabitants to be covered with the service with the subsidy indicated for each Group in Annex ET-5 “Subsidy Amount Offered per each Group” of Section III—Technical Specifications.”

Source: World Bank bidding documents of each project.

### **OBA with Incumbent Service Providers**

Incumbent service providers, both private and public sector, serve large portions of urban and peri-urban areas in developing countries. Working with incumbents is key for OBA schemes to reach large groups of mainly poor un-served customers. Hence, a second wave of the World Bank’s OBA pilot projects, referred to as the “incumbent

contract” model, is providing grounds to design subsidy connections in low-income areas within or beyond the perimeter of an existing concession serviced by an incumbent provider.<sup>13</sup> Examples of OBA projects where the World Bank is initiating this model include water connections for poor households in Brazil, Indonesia and Morocco, and natural gas distribution in Colombia and Armenia.<sup>14</sup>

As indicated earlier in this section, switching to OBA contracts becomes more challenging in these schemes because it involves a direct negotiation with an incumbent. As OBA payments are linked to the delivery of services and the service itself is measured as units of output, pre-determining an adequate, measurable output price level is important. A price level set too low may not provide incentives to the service provider to actually produce the output, and a price level that is too generous may possibly lead to overprovision and give the service provider excess profits.

In this situation, because competitive bidding cannot be applied, the incumbent’s costs cannot be assumed to be economic and efficient. Information asymmetry on pricing and efficiencies is therefore an obvious negotiating constraint.<sup>15</sup> Hence, the challenge for contracting agencies is to produce – and update – acceptable methods for setting standard unit prices that include (i) auditable documentation of the expenditures underlying the outputs so that the amounts paid can be compared with actual expenditures; and (ii) a reasonable test of economy and efficiency.

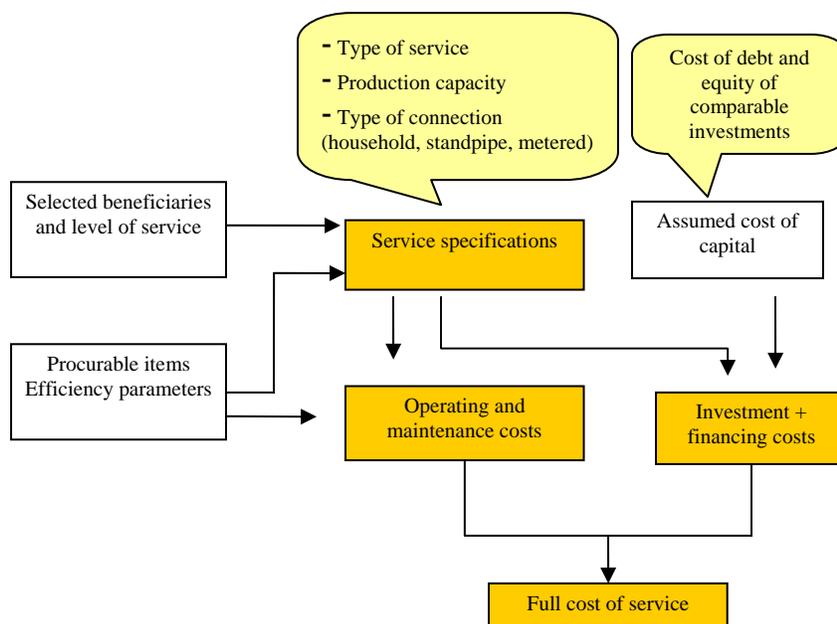
### **Standard Unit Price**

To meet the expenditure-based and efficiency requirements in direct negotiations with incumbent service providers, the World Bank is exploring the use of standard unit price (SUP) methodologies. The SUP concept involves the establishment of an amount that represents a realistic approximation to the efficient cost of providing the specified service output. Efficiency under output-based subsidies means to deliver an output with the least inputs possible. This can be assessed using many different variables; for example, based on levels and quality of serviceability, average consumption of potential users, average tariff rate for the target segment, fee collection efficiency, and rate of return on capital and operation and maintenance expenditures.

The review steps are similar as under direct contracting and sole sourcing. The only difference in analysis is the source of cost-recovery: in OBA costs are recovered from the subsidy. Generally, the amount of subsidy to be paid per output unit is computed as the difference between the incumbent's capital, financing, operating and maintenance costs of serving the target users, and the tariff and connection charge revenues from these users. Figure 2 illustrates the flow of review actions by a contracting agency prior to negotiations with an incumbent.

Depending upon the nature of the cost components, the kind of inputs, and the availability of market data, incumbent's estimations can be challenged by using either one or more of three SUP methods. The first and the simplest method is the aggregation of known input prices, whereby input prices will be substituted by actual prices prevailing in competitive markets. The second method is market price

**FIGURE 2**  
**Flow of Review Actions by a Contracting Agency prior to Negotiations**



analysis used when a private market for the input does not exist, but prices can be obtained by way of comparison against prevailing prices in similar markets. The third and most complex method is benchmarking, whereby in the absence of competitive markets, prices have to be built-up based on data-intensive assumptions. World Bank projects apply these techniques. Emerging lessons from these applications suggest that a combination of all elements should lead to a sound methodology to determine SUP.

### **Negotiation Steps**

Given the required guesswork involved in SUP, the simplest form of negotiation with an incumbent is by requiring mandatory use of competitive procurement for output's unit supply of materials and works. The savings obtained by using competition in the contracting process will maximize the tangible part financed by OBA subsidy. This leaves the negotiation of the subsidy limited to the analysis of incumbent's intangible costs or gains, which are difficult to identify and value at the time of negotiation, and other costs such as recurrent costs and some local costs, which may not be subject to procurement procedures.

### ***Output's Procurable Items***

For the output's procurable items (such as small works, materials and maintenance services for gas household connections), under the World Bank's procurement guidelines, incumbents are treated differently depending on whether there was competition for the market. If the selection of the incumbent did not take place according to appropriate ICB (or NCB) procedures, then the goods, works, or services required for the output to be financed by the World Bank need to be procured by the incumbent in accordance with competitive procedures consistent with the World Bank procurement guidelines (World Bank, 2004a, Section II). Because there was no competition for the market, the Bank requires a degree of competition in the market (i.e., competitive procurement of inputs by the incumbent provider, using World Bank procurement rules). OBA projects would then require an ex-post assessment by a third party, such as an independent auditor, to determine that the inputs were procured competitively.

Alternatively, when the incumbent was originally selected through acceptable competitive bidding procedures, the World Bank carries

out an assessment of the incumbent's procurement systems. If the assessment demonstrates that the incumbent's procurement procedures are competitive and appropriate, the goods, works, or services required for the output, and to be financed by the World Bank, can be then procured under the incumbent service provider's own systems (World Bank, 2004b).

### ***Incumbent's Efficiencies***

The second consideration in determining the SUP is the assessment of efficiencies prevailing in the service markets. Efficiency incentives are missing completely in cases where unit costs in a first step have been established upon actual input prices. These intangible or non-procurable efficiencies can result in incumbent's actual costs higher than the actual unit costs. A majority of the contracts set a unit cost price and a subsidy amount per output and fix it for a period of time. Any surplus gains during this period will be kept, any losses incurred will be assumed by the incumbent. If the incumbent is sensitive to market mechanisms, the contract should include efficiency incentives. During the period of time where the unit costs and the subsidy amount are fixed the incumbent will have incentives to increase efficiency. This means operating on lower costs than the estimated unit costs will give the incumbent a surplus to recoup long-term investments. After that a financial reassessment will take place and the accrued surplus profits will lead to a lowering of the unit costs and a resulting decline in the subsidy amount. The newly calculated unit costs and subsidy amount are than again fixed for another period.

To make it consistent with the principle of using the proceeds for the intended purposes, the intangible expenditures and non-procurable items financed by the subsidy can be negotiated, for example, on the basis of a management fee.<sup>16</sup> This management fee can include a margin to reward the incumbent for its efficiencies, especially if the incumbent is sensitive to market conditions. The fee should be predefined on the basis of a benchmark for the incumbent's efficiency growth. The benchmark can be developed by way of comparison with similar operators existing in the particular sector on a national as well as international basis.

As the contracting agency is expected to gain more knowledge and information on variations in market conditions of the service provision, agreement can then be reached to re-assess the subsidy amount the same way it is amply admitted for price variations in implementation costs under input-based procured contracts.

### CONCLUSION

The introduction of OBA approaches by the World Bank is providing valuable lessons for switching from input-based to performance-based contracts elsewhere. Notable among these are the benefits of in terms of cost-efficiency and reduction of opportunities for corruption.

OBA contracts, especially under competitive bidding, implicitly delegate the input-based procurement functions, formerly done by the contracting agency, to the contractor, whose lowest bid proposal for the OBA subsidy will likely reflect best procurement methods for the acquisition of the inputs needed to produce the agreed output. The cost savings obtained in procurement and contract management by the contracting agency can be used to finance more rigorous downstream safeguards and monitoring mechanisms of OBA contracts, which will enhance the anti-corruption efforts in the sector.

Caution is needed when designing the procurement methodology of the OBA contract, because the requirement that contracts need to be “expenditure-based” must be reconciled with the “performance-based” nature of the subsidy. The means of reconciliation depend upon the nature of the market where services are being procured. In services where there are multiple providers, competition increases the likelihood that the costs upon which the OBA subsidy is calculated will be efficient. The case of structuring OBA subsidies when there is an existing incumbent remains challenging. Procurement reviews are limited in the ability to analyze efficiencies (since many of the efficiencies may come from non-procurable inputs and other non-measurable considerations). Therefore, robust evaluation of incentives, together with cost approximation (as opposed to actual cost) will allow users to reap the benefits of an OBA contract.

The details offered in this paper of the World Bank experience generally with OBA contracts, and the procurement methods more specifically, should offer informative guidance for governments that

seek to introduce OBA more broadly in social and infrastructure services.

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#### **NOTES**

1. The term "infrastructure" refers to energy (including oil, gas and mining), information and telecommunications, transportation, water supply and sanitation and urban services.
2. In OBA the concept of contractor has a narrow definition. It is the party who under a subsidy contract delivers a service defined as output. This party can be the operator of an infrastructure network granted under any modality of concession rights (concessionaire).
3. The procurement guidelines define performance-based procurement, also called output-based procurement, as the competitive procurement processes (ICB or NCB) resulting in a contractual relationship where payments are made for measured outputs instead of the traditional way where inputs are measured. It can involve: (a) the provision of services to be paid on the basis of outputs; (b) design, supply, construction (or rehabilitation) and commissioning of a facility to be operated by the borrower; or (c) design, supply, construction (or rehabilitation) of a facility and provision of services for its operation and maintenance for a defined period of years after its commissioning.

4. Performance risk, which includes market demand risk (price and volume) and payment risks, relates to the ability of an operator to deliver contracted services.
5. Kaufmann, Daniel, Aart Kraay and Massimo Mastruzzi. (2005). This survey covers 209 countries for 1996-2004, and measures, within six governance indicators, the costs of corruption of public procurement.
6. These projects are at various stages of development, ranging from initial design to service delivered and subsidy disbursed. A list and description of these projects has been compiled by the Global Partnership on Output-Based Aid (GPOBA) [On-line]. Available at [www.gpoba.org](http://www.gpoba.org). [Retrieved June 26, 2006].
7. For more detailed on these OBA applications see Drees-Gross et al. (2005), and Mumssen (2004).
8. For more detailed on these OBA applications see Cockburn and Low (2005), Intven, Sepúlveda and Howard (2004), and Grewal et al. (2006).
9. The World Bank's Articles of Agreement; Article III, Section 5(b) provides the basis for expenditure eligibility under the Bank's projects, and refers to this principle when it indicates that "the Bank shall make arrangements to ensure that the proceeds of any loan are used only for the purposes for which the loan was granted, with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations."
10. For example, see The World Bank (2004). Paragraph 1.2.
11. For more detailed on these OBA applications see Cockburn and Low (2005), Intven, Sepúlveda and Howard (2004), and Mumssen (2004).
12. NCB could be justified in the following examples: (i) when foreign bidders are not expected to be interested because the contract values are small, the services are scattered geographically or spread over time, services are labor intensive, or the services are available locally at prices below the international market; or (ii) when the advantages of ICB are clearly outweighed by the administrative or financial burden involved.

13. Generally, concession contracts grant incumbent exclusive rights to supply a geographic area. Under OBA, this legal exclusivity includes the target beneficiaries of the subsidy.
14. For details on these projects, see GPOBA [on-line]. Available at [www.gpoba.org](http://www.gpoba.org). [Retrieved June 26, 2006].
15. A useful framework has recently been developed in Australia, where specific guidelines have been issued to conduct direct negotiations. See, Independent Commission Against Corruption (2006).
16. As proposed by Ehrhardt and McKinley (2003).

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