Chapter 19

PERFORMANCE-BASED PROCUREMENT: THE KEY TO EFFECTIVE BASIC SERVICES PROVISION IN DEVELOPING COUNTRIES

Patricia I. Baquero

INTRODUCTION

Even though the provision of basic public services has historically been considered a core state function, the 1990s saw a noticeable increase in both developed and developing countries in contracting to private providers a range of services that had been previously supplied by governments. Such increase was mainly driven by pressures to reduce the impact on budget of the cost of service provision (Hensher & Stanley, 2002). Reform packages promoted by the World Bank (hereinafter referred to as the "Bank") and other bilateral and multilateral development financing agencies for low- and middle-income countries often included "contracting out" and other options of private participation in the provision of basic public services. Those reforms were predicated on the notion that, aside from the positive impact of the private provision of services on government budgets, the private sector is usually better resourced to provide a variety of those services, and that the role of governments should be limited to facilitating and regulating the private sector activities.

Initially, the focus of contracting with the private sector for the provision of basic public services was typically on minimizing costs to government rather than on delivering specific service quality outcomes (Hensher & Stanley, 2002). Even though the costs to governments were reduced under many of those contracts, there was no indication that the intended contract outcomes were being achieved.

Although not intended for basic public services, the appearance of performance-based service contracting offered a promising means to ensure that basic public services provided by the private sector were not only cost-efficient but also cost-effective.

Performance-based approaches to service contracting are also generally known or referred to as performance-based or output-based procurement. In this chapter, we refer to these contracting modalities collectively as performance-based procurement, or PBP.

The Bank has been and currently is assisting its client countries so they may obtain the benefits of applying PBP approaches to the provision of infrastructure and social services under Bank-financed projects, when the circumstances of each project, sector and country involved, makes its use appropriate. The recently launched “Infrastructure Action Plan”, focused on making more effective use of new and/or existing instruments, including the whole spectrum of public-private partnerships, provides ample opportunity to expand the use of PBP for the contracting of infrastructure services.

This paper presents how PBP schemes may contribute to ensure better basic public services in infrastructure and social sectors in Bank client countries; describes how the Bank procurement policies, methods, and tools have enabled its borrowers to pursue PBP approaches; and looks forward into other ways to continue assisting client countries interested in obtaining the benefits of applying these schemes to the provision of infrastructure and social services under Bank-financed projects.

METHODS

This paper is based on research that included official Bank publications on procurement policies and rules, projects database, and articles prepared by Bank staff, available on the web (www.worldbank.org); official publications and guidance notes from various U.S. government entities; and publications and articles on both private participation options and performance-based procurement. It is also based on personal on-the-job experience of the author and on discussions with Bank staff in the Private Sector Department.

The information gathered was analyzed to identify all relevant dimensions, synthesized, and then organized so as to facilitate their understanding by any audience, including those who are not familiar with either private participation options for the provision of public services or the Bank procurement policies, rules and methods. Resulting conclusions were drawn from the analysis of all elements that evidenced the potential benefits of PBP approaches to developing countries in the provision of publicly financed basic public services, as well as the extent of Bank assistance, from the procurement standpoint, to borrowers interested in pursuing these approaches for the provision of basic public services.

RESULTS

The analysis of information available shows that for the last decade, the Bank procurement policies, methods, and tools have been enabling its country clients to pursue PBP approaches (even though they may have not been referred to as PBP) in contracting with the private sector for the provision of publicly financed basic public services. The initial results of some early contracting experiences involving PBP as described in Part 4 of the Discussion Section, are extremely encouraging and corroborate the important role of PBP in improving project developmental outcomes.

The recent inclusion in the Bank procurement guidelines of references to PBP indicates an official acknowledgement of a contracting approach that has been utilized for a while under different modalities by borrowers under the advice and guidance of Bank staff.

Notwithstanding what the Bank has done to this date, it still needs to develop other tools to guide its clients and staff through the appropriate use of PBP approaches in development projects for the provision of basic public services by the private sector. The plans to develop bidding documents for performance-based management contracts, guidance notes for staff on the use of output-based subsidy payment schemes, and to carry out further actions related to the use of PBP for the acquisition of service-delivering utilities installations (*e.g.*, staff training, client education, piloting in projects, etc.) are aimed in that direction and constitute one more expression of the Bank's commitment to continue assisting its borrowers in developing countries to achieve the Millennium Development Goals, agreed to by the United Nations members in 2000 and are aimed at sustainable poverty reduction.

DISCUSSION

What is Performance-Based Procurement (PBP)?

Pioneered within the Department of Defense, performance-based service contracting emerged in the U.S. in the 1990s and later expanded to the whole federal government. Many services, ranging from janitorial and guard services to computer maintenance, to aircraft and technical support, are now acquired with this approach under fixed-price contracts (OFPP/OMB, 1998). Other industrialized (mostly Scandinavian) countries in Europe also adopted this new approach to service contracting (Hensher & Stanley, 2002).

PBP schemes delegate service delivery to private providers under legally binding agreements that tie payments to measurable outputs that meet a predefined performance standard (normally expressed in terms of quality, quantity or reliability level). Traditionally, government service contracts worldwide have tended to emphasize inputs rather than outcomes. Under PBP schemes, the desired end results expected of the contractor are clearly spelled out without prescribing the manner in which the work is to be performed, thus giving contractors freedom to determine how to meet the government's performance objectives (OFPP/OMB, 1998). Well designed PBP schemes encourage contractors to be innovative and to find cost-effective ways of delivering services and, by shifting the focus from process to results, they also promise better outcomes (GAO, 2002).

Important elements of PBP deserving careful attention during the procurement planning phase and its further implementation include the performance-based statements of work (including the performance standards and indicators), the quality assurance surveillance plan, the selection procedures, and the contract type.

Private Participation Options in Public Services Provision

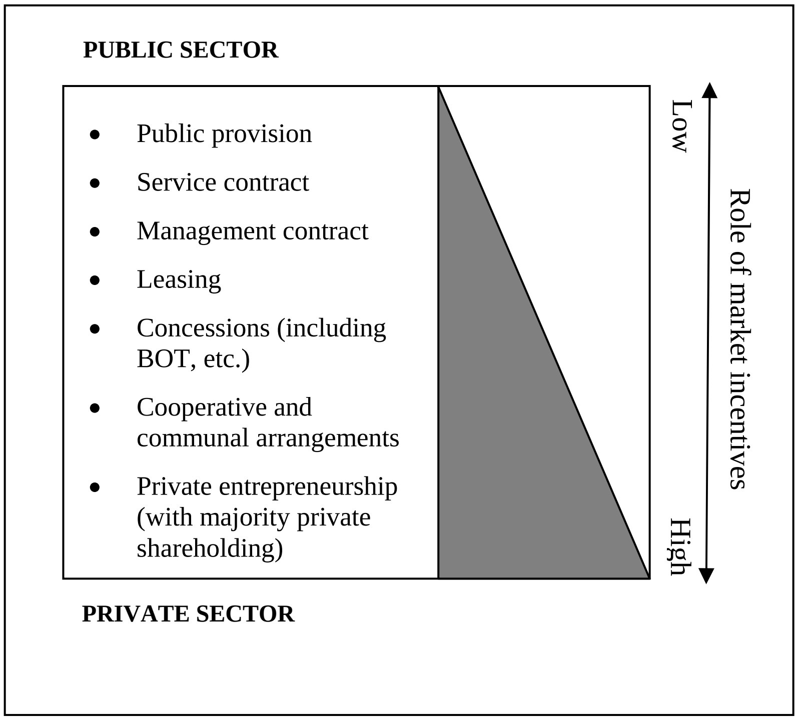
Options for private participation in the provision of basic public services fall along a continuum between the extremes of almost completely public responsibility through joint responsibility to completely private responsibility, as shown in Figure 1 (Lee & Jouralev, 1997). Even though these options emerged in relation to infrastructure services, they are applicable to social sectors as well.

Table 1 shows the distribution of responsibilities and risks under these different options of private sector participation for infrastructure (Lee & Jouralev, 1997).

Procurement in Bank-Financed Projects

The Bank, one of the world's largest sources of development assistance, provides low-interest loans, interest-free credit, and grants to developing countries for projects designed to reduce poverty and facilitate the Millennium Development Goals. Only acquisitions financed in whole or in part from Bank funds (loans or credits) or Bank-administered trust funds need to follow Bank rules for procurement and for engagement of consultants.

FIGURE 1
Types of Institutional Forms by
Degree of Public and Private Sector Responsibility



Source: Kessides (1993).

Bank rules applicable to its borrowers are contained in two sets of guidelines: one reflecting its policies for engagement of consultants and the other, reflecting its procurement policies for procurement of goods, works, and all other services. It should be noted that procurement or consultant contracts are entered into by the implementing agencies of a borrower country and a private (for-profit or not-for-profit) contractor. The Bank is not a party to these contracts.

The Bank issues standard documents for a variety of contracting needs, which are of mandatory use by borrowers. They include documents for procurement of works, goods, supply and installation of plant and equipment, textbooks, health sector goods; also, for prequalification for

TABLE 1
Distribution of Responsibilities and Risks Under Different Private Participation Options

Responsibilities	**Options**				
	Service contracts	**Management contracts**	**Leasing (or *affermage*)**	**Concessions (including BOT)**	**Private (Divestiture) & Cooperative**
Ownership of assets	State or mixed	State or mixed	State or mixed	State or mixed	Private
Investment planning and regulation	Parent agency or separate public authority	Parent agency or separate public authority	Parent agency or separate public authority	State, negotiated with contractor	None or state agency
Capital financing	Public	Public	Public	Private	Private
Working capital	Public	Public	Private	Private	Private
Execution of works	Private as specified	Public	Public	Private	Private
Operation and maintenance	Private as specified	Private	Private	Private	Private
Management authority	Public	Private	Private	Private	Private
Commercial (demand) risk	Public	Mainly public	Private	Private	Private
Basis of compensation	Based on services rendered	Based on services rendered and results	Based on results	Based on results	Privately determined
	Less than 5 years	About 3-5 years	5-10 years	10-30 years	Indefinite

Source: Adapted from Kessides (1993)

works and for health sector goods; and a standard request for proposals for consultant services. All documents include conditions of contract and contract forms.

International Competitive Bidding (ICB) is the Bank preferred method to achieve its procurement principles of economy, efficiency, transparency and equal opportunity to all bidders, but it may accept other methods prescribed in its procurement guidelines where ICB is not the most appropriate procurement method. In any case, the acceptable procurement methods for each acquisition under a project shall be defined in the corresponding Loan or Credit Agreement.

These days, investment projects financed by the Bank differ a lot from those "brick and mortar" projects that were the subject of the Bank's initial development financing activities. The Bank has tried to keep up with the changes and through the years has adapted its procurement policies and rules to the needs of its borrowers.

As an example of the Bank efforts in keeping its procurement tools updated, in 1995 it revised the procurement guidelines to address for the first time, procurement under BOO (build-own-operate), BOT (build-operate-transfer), BOOT (build-own-operate-transfer), and similar private participation options.

Use of PBP and Similar Approaches in Bank-Financed Projects

For years, the Bank procurement guidelines have encouraged the use of minimum performance requirements by its borrowers´ implementing agencies when defining their requirements. However, no specific reference to PBP and its application in Bank-financed projects was made in the guidelines until the last revision in May 2004. However, for the last decade, project-implementing agencies in Bank borrower countries have been able to use, different PBP approaches to delegate the provision of basic public services to private providers under development projects in several sectors. However, those approaches were seldom identified or referred to as PBP.

In infrastructure, PBP or similar approaches were or are currently used in the following contract types:

- Management contracts for utilities, mainly in the water supply and sanitation and in the energy sectors;
- Concession contracts for services in the energy, the water and sanitation, and in the telecommunications sectors, under projects where the Bank has financed either public investments or subsidies paid to the concessionaire under a scheme that the Bank denominates "Output-Based Aid", or OBA (OBA supports the sustainable delivery of basic services to those least able to afford them and to those currently without access. Its use is intended for cases where policy concerns would justify public funding to replace or complement user fees related to connection or consumption, and where payment of those funds is tied to actual service delivery).

- Design, build, and operate (DBO) contracts for water supply and sanitation; and
- Contracts for the rehabilitation, maintenance, and management of roads.

In the health sector, PBP or similar approaches (mostly using the so called OBA scheme) have been piloted in several projects for the provision of primary health care services.

Payment to the private provider under many of those contracts consists of two parts: i) a fixed monthly payment and ii) a variable payment contingent to the achievement of the performance standards, outputs, or milestones set in the contract, as evidenced by the indicators also set in the contract. In the case of management contracts, the Bank financing covers the base fee and/or the performance-based incentive payments, and in some cases, the cost of rehabilitations or operations investment fund. It is important to notice that, even within the same sector, every contract has to be responsive to each client's wishes and tailored to suit the local conditions.

Some of the contracting experiences of Bank client countries with PBP approaches and their initial results are described below:

- ***Aguas de Monagas (AdM), Venezuela*.** Four-year performance-based management contract issued in 1997 to improve the water and sanitation services of a state-owned company. Payment to the private operator had two parts: i) a fixed monthly payment and ii) a variable incentive payment contingent on the operator surpassing the performance targets set in the contract. Unaccounted-for water and collection efficiency were the performance indicators used to calculate the incentive payment. After a year and a half AdM made significant improvements: (i) for the first time it had a reliable accounting and cost control system that gave a clear picture of its financial situation; (ii) billings almost doubled in real terms; (iii) collections tripled; and (iv) water supply was up from twelve to twenty-two hours a day on average (Mariño, Stein & Wulff, 1998).
- ***The Amman Water and Sewerage Management Project (AWSM), Jordan***. Four-year performance-based management contract issued in 1999 to improve the water and sanitation services of a state-owned company. Payment to the private operator had two parts: a base fee and performance-based bonuses, which permitted the operator to retain a percentage of the incremental cash flow resulting from improved performance and efficiency. After the first six months of operations, some of the most significant improvements were: (i) outstanding leaks were reduced from 350 to 130; (ii) 31,917 leaks were repaired, 68% of

which in less than 24 hours; (iii) losses were reduced from 15% to 1%, (iv) breakdowns were reduced by 80%; (v) collection rate increased by 18%; and (vi) 4,900 new water connections were installed (Saghir, Jme'an & Macoun, 2000).

- ***Lesotho- LEC - Sad-elec, Lesotho***. Three-year performance-based management contract issued in 2001 to improve access of services and the financial situation of a state-owned electricity company. Payment to the private operator consisted of a fixed fee with performance retention. After the first 18 months, results included: (i) 5,014 new connections made (of 8,000 targeted); (ii) losses reduced from 26% to 20%; and (iii) US$4.7 million collected from debts. The operator lost $375,000 due to non-performance (Davies, 2004).
- ***National Highway Rehabilitation and Maintenance Project – Argentina***. Set of multi-year performance-based contracts issued in 1998 for the rehabilitation, maintenance and management of the national road network. Payments are 100% based on performance with service providers given the opportunity to recover initially withheld funds through eventual completion of works to standards. They have shown noticeable improvements to road system preservation. During the first few years of the project, the share of road in poor conditions fell from 35% to practically 0%, and transport costs on that network were reduced by more than 10%.

PBP according to the Bank

As mentioned earlier, in the May 2004 revision of the procurement guidelines, the Bank addressed PBP and its application in Bank-financed projects for the first time (in paragraphs 3.14 and 3.15).

According to the Bank procurement guidelines, PBP is a competitive procurement process resulting in a contractual relationship where payments are made for measured outputs instead of the traditional way where inputs are measured. PBP presents the following other characteristics, according to the guidelines:

- Outputs are aimed at satisfying a functional need in terms of quality, quantity, and reliability;
- The technical specifications define the desired result, which outputs will be measured, and how they will be measured;
- Payment is made in accordance with the quantity of outputs delivered, subject to their delivery at the level of quality required; reductions from

payments (or retentions) may be made for lower-quality level of outputs, and in certain cases, premiums may be paid for higher quality level of outputs; and

- The bidding documents do not normally prescribe the inputs or a work method for the contractor, thus leaving the contractor free to propose the most appropriate solution, based on mature and well proven experience, but the contractor shall demonstrate that the level of quality specified in the bidding documents will be achieved.

Despite the apparent advantages of PBP, its use in Bank-financed projects is not deemed a panacea or a one-fits-all solution. Paragraph 3.14 of the guidelines cautions that "the use of Performance-Based Procurement in Bank financed projects should be the result of the satisfactory technical analysis of the different options available and should be either included in the Project Appraisal Document (PAD)[1] or subject to prior approval by the Bank for incorporation into the procurement plan[2]".

As indicated in the guidelines, examples of PBP application in Bank-financed projects may involve:

- Provision of services to be paid on the basis of outputs (*e.g.*, provision of medical services such as office visits or defined laboratory test);
- Design, supply, construction (or rehabilitation), and commissioning of a facility to be operated by the borrower; or
- Design, supply, construction (or rehabilitation) of a facility, and provision of services for its operation and maintenance, for a defined period of years after commissioning.

As to bidding documents that make use of PBP approaches, in 2002 the Bank issued a sample bidding document (to be voluntarily used by borrowers on a trial basis) for performance-based management and maintenance of roads and another for non-consultant services (with lump sum payments based on outputs or milestones) and is currently planning to develop one for performance-based management contracts. The Bank is also planning to issue a guidance note to staff on the use of OBA subsidy schemes.

Management contracts pose an interesting challenge as they lie between a technical assistance (which should be awarded on the basis of skill and experience) and a lease (which should be awarded on the basis of price) (Mariño, Stein & Wulff, 1998). In Bank-financed projects, performance-based management contracts have been awarded using a hybrid process that combines elements from the consultants guidelines (evaluation of price and non-price factors, such as experience, methodology or work plan, key personnel, etc.) and from the procurement guidelines (prequalification and performance securities) and assigning a price/non-price factors ratio for evaluation normally higher than the usual 20/80 ratio used for consultant services.

Study on PBP for Large and/or Complex Infrastructure Projects

At the end of 2002, prior to the inclusion of the PBP concept in the procurement guidelines, the Bank commissioned a study to assess whether PBP approaches provide more optimal results in contracting for large and/or complex infrastructure projects financed by multilateral development banks in developing countries than “traditional” procurement methods. “Traditional” methods are those where detailed technical drawings and specifications are provided and payments are related to inputs. The study reviewed various PBP approaches currently in use, compared them to “traditional” procurement methods, and assessed the feasibility of using PBP approaches in projects financed by the Bank. The final report was delivered in March 2004 but has not been officially published yet.

The scope of the study was limited to utilities industrial facilities where design, supply, construction, and commissioning is made by the contractor and where the operation and maintenance of the facility is carried out by either the government personnel (referred to in the study as “Scenario 1”) or the contractor for a certain number of years (referred to as “Scenario 2”).

In comparing the use of PBP approaches to “traditional” procurement methods in contracting for industrial utilities installations, the study found that the number of advantages outgrows that of disadvantages (Table 2 presents the major advantages and disadvantages found).

The study determined that the Bank procurement guidelines do not preclude the use of PBP. Figure 2 illustrates the alternative procurement processes, consistent with the Bank procurement guidelines, recommended in the study for the use of PBP under each scenario.

The study also determined that the Bank standard bidding documents for supply and installation of plant and equipment may require only minor adjustments to accommodate their use for PBP.

Notwithstanding the advantages attributed to PBP, the study acknowledged that during the project strategy formulation the employer should carefully assess all alternative contractual approaches comprised within the full spectrum of private participation options; determine what is

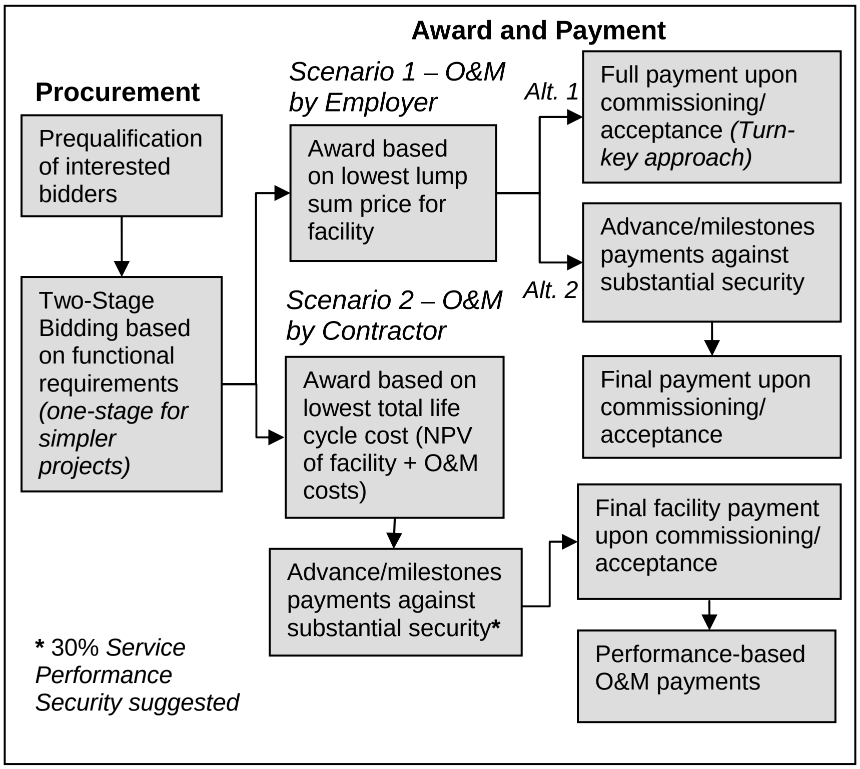
TABLE 2
Major Advantages and Disadvantages of using PBP as Compared to "Traditional" Procurement Approaches

Advantages	Disadvantages
Employers need not possess advance technical knowledge yet can choose from technically advanced solutions proposed by bidders.	Preparation of functional specifications may require specialized training of government personnel.
Leeway to offer latest and more efficient technology without the risk of disclosing trade secrets allows bidder competitive advantage.	Evaluation of different offered solutions by government personnel may require hiring external expertise.
Shorter implementation time and avoidance of bidder claims related to defective or incomplete technical specifications.	The employer's need for higher performance security may increase the project cost and restrict competition as only bidders with financial strength will meet prequalification requirements.
More responsibility and risk is transferred to the contractor.	
The Employer purchases a service-delivering installation rather than a plain facility.	
Financiers and donors money is more effectively used.	

the project's primary objective; consider market capabilities and conditions for the particular sector and country; and select the most appropriate alternative.

The Bank's next steps arising from the PBP study include: (1) training of Bank staff and education of borrowers on the preparation of functional specifications, identification of clear measurable indicators, and development of fair and transparent methods to evaluate proposals with different approaches; (2) carrying out pilot projects in borrower countries interested in trying PBP; (3) preparing a tool kit to assist borrowers and Bank staff; (4) and sharing knowledge on PBP across the Bank and with other multilateral development banks.

FIGURE 2
Alternative Processes for PBP Use
Under Bank-Financed Infrastructure Projects



CONCLUSION

PBP approaches in Bank-financed projects have been possible under existing Bank procurement policies, methods, and tools. From the preliminary results depicted above, it is evident that the delegation of the provision of certain infrastructure services to the private sector under PBP is called to become an important enabler for the provision of cost-effective public services in developing countries.

Notwithstanding the advantages attributed to private participation options under PBP schemes for the achievement of better public infrastructure service, there may be cases where a country's interests are better served by the use of more traditional procurement alternatives. Consequently, government officials are advised to assess, during the project strategy formulation, all alternatives and related factors and to select the most appropriate alternative on that basis.

To guide its clients and staff through the appropriate use of PBP approaches in development projects for the provision of basic public services by the private sector, the Bank will be soon carrying out awareness-raising and training activities, as well as project piloting related to the use of PBP for the acquisition of service-delivery installations and developing bidding documents for performance-based management contracts and guidance notes for staff on the use of output-based subsidy payment schemes.

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NOTES

1. The PAD comprises all the information agreed upon by the Bank and the prospective borrower on the terms and conditions of the proposed loan to finance a project, which is then presented to the Bank Board of Directors for its approval.
2. The Procurement Plan provides a list of all goods, works, and consulting contracts that will be financed during the next 18 months of project implementation. The plan indicates (a) the estimated value for each contract or groups of contracts; (b) the procurement or selection method that will be used (for example, International Competitive Bidding); (c) the related World Bank review procedures; and (d) the estimated timing for various steps in the procurement process (for example, issuance of bidding documents or awarding of contract). The Procurement Plan is prepared by Bank borrowers and is approved by the Bank prior to loan negotiations and referred to in the Loan or Credit Agreement. The Procurement Plan covers a period of at least 18 months and is updated annually or as needed throughout the duration of the project.

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