



Building Partnerships for Development
in Water and Sanitation
www.bpdws.org

Emerging PPP trends in the water & sanitation sector

Aileen Anderson with contributions from Jan G. Janssens¹
April 2011

This paper presents an overview of emerging shifts in approaches to Public-Private Partnerships (PPPs) in the water and sanitation sector. Based on interviews with 21 professionals who are actively involved in the field, the analysis focused on four areas: contracts, regulation, finance and stakeholder engagement. Whilst there are obvious limitations to using interviews as a methodology, our aim was to determine experts' perceptions of where the trends in PPPs are headed.²

Although there has been an overall decline in the number of large-scale contracts awarded to international private sector companies since 2001, PPPs, particularly through the local and national private sector, are still active in the water sector and serving an increasing percentage of the population.³ New local players are taking on greater roles and public utilities are being contracted to work in other jurisdictions. Emphasis in recent years has shifted from longer-term concession and lease contracts to shorter, more targeted, performance-based management and service contracts. Monitoring compliance with these performance targets requires sound regulatory instruments that are currently constrained in many developing countries by a lack of autonomy and clear information on which regulatory decisions need to be made. As political interference keeps tariff levels low, financing continues to be a major challenge for the sector, while new innovative financing options are blurring the boundaries between public and private. Stakeholder engagement emerges as a clear priority for the sector, with increased accountability expected of all service providers. Three new areas that are changing the PPP landscape include PPPs with local companies, PPPs in small towns and rural areas, and greater private sector involvement in sanitation and wastewater treatment.

¹ BPD's Tracey Keatman and Ken Caplan also supported the drafting of this document and conducted several interviews.

² A range of websites, notably those of the World Bank, PPIAF, OECD and various academic institutions, provide up-to-date literature on case studies and other angles of analysis.

³ Marin, P. (2009). *Public-private partnerships for urban water utilities: A review of experiences in developing countries – Trends and policy options*: No 8, World Bank & PPIAF p.24.

Introduction

Over the past few years, Building Partnerships for Development in Water and Sanitation (BPD) has been working with a set of tools that support the planning for and implementation of public private partnerships (PPPs) in the water and sanitation sectors. These tools were created in 2005 by a Swiss consortium, including the SDC, SECO and Swiss Re.⁴ Since their development, there has been an evolution in the context of PPPs, and BPD is now seeking to understand how these tools might meet the current needs of practitioners and policymakers in the developing world. This paper synthesises expert opinion on emerging trends in PPPs, particularly in four areas: contracts, regulation, finance and stakeholder engagement.

Methodology

Three researchers conducted 21 telephone interviews with professionals actively involved in the water and sanitation sectors, following a semi-structured interview format. Interviewees were asked to comment generally on emerging trends and future challenges, as well as to discuss specific developments with respect to contracts, regulation, finance and stakeholder engagement. The interviews were conducted between July and November 2010 with representatives from a range of organisations, including development banks, private sector operators, development agencies and academic institutions, and a number of independent consultants active in the area. To ensure accurate interpretation, all interviewees were invited to comment on an initial draft of this paper.

List of Interviewees

- Sanford Berg, *University of Florida*
- Aymeric Blanc, *Agence Française de Développement (AFD)*
- Alexandre Brailowsky, *Suez Environment*
- Didier Carron, *POYRY Consulting*
- Oswald Chanda, *African Development Bank*
- Jorge Ducci, *Inter-American Development Bank*
- Jean-Pierre Florentin, *Nodalis Conseil*
- Richard Franceys, *Cranfield University*
- Katharina Gassner, *World Bank*
- François Gaudet, *European Bank for Reconstruction and Development*
- Ada Karina Izaguirre, *Public-Private Infrastructure Advisory Facility*
- Celine Kauffmann, *Organisation for Economic Cooperation and Development*
- Xavier Maitre Robert, *International Federation of Private Water Operators (AquaFed)*
- Philippe Marin, *World Bank*
- Ulrike Pokorski da Cunha, *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)*
- Arjun Thapan, *Asian Development Bank*
- Sophie Trémolet, *Trémolet Consulting*
- Thelma Triche, *Independent Consultant*
- Bruno Valfrey-Visser, *HydroConseil*
- Gerhard van den Top, *Vitens Evides International*
- Jos van Gastel, *Aquanet*

⁴ www.partnershipsforwater.net

Overview of PPPs

Since 2001, there has been a decrease in the annual number of PPP contracts awarded in the water and sanitation sector. Most of the decline is attributed to the fallout from riskier contracts that were signed during the 1990s, particularly in Latin America and Africa.⁵ Many of these terminated contracts were highly political and resulted in significant investment losses for the private sector (and in some cases for the public sector as well). The result is that there is now a more cautious approach from all stakeholders towards PPP contracts, seeing them as only one option for infrastructure reform. The challenge remains that, in many instances, service providers (both public and private) are not held to account and transparent discussions about who pays the full cost of services and needed expansion are often lacking.

“Basically, it’s a political thing. We don’t have many success stories. Consequently, the private sector is no longer keen to engage in these markets. The World Bank also changed its policy from promoting PPPs as a condition. They are now focusing on public companies as well. No-one is pushing for PPPs.”

However, even with the vast majority of utilities remaining under public sector management, PPPs are by no means a thing of the past. The sector seems to have moved beyond the sterile debates about public versus private into more concrete discussions about how to ensure the best service possible under a given set of resource limitations. Provided key elements are in place—such as political support and proven strategies for addressing the operational and service delivery constraints like effective regulation, sustainable financing, transparent monitoring and committed stakeholder engagement—there is growing recognition that good quality

service can be achieved, regardless of the service delivery model.⁶

A second generation of PPP contracts are now emerging that reflect many of the lessons learned in the 1990s and early 2000s. More recent contracts are taking more innovative, context-specific approaches that are better suited to developing country circumstances. Whilst not easily generalised into global or even regional trends, some broad themes are emerging and summarised in this paper⁷, organised around the key issues of contracts, financing, regulation and stakeholder engagement.

“There was a tendency for the WB and other donors to see the private sector as a panacea but they now have a more balanced approach. There is a recognition that contracts with the private operators are just one tool – but they’re not the only one.”

“It does not matter whether utilities are run as public or private, but they need to be promoted as a business with water agents free to seek funding from different sources.”

Contracts

The boundaries between public and private are becoming less distinct. Public utilities are being awarded international contracts in other countries. For example, ONEP (Morocco) won an affermage contract in Cameroon and Vitens Evides Int. (Netherlands) was awarded a management contract in Ghana. There are also joint ventures and mixed company arrangements where a private operator may divide their shares with a public utility or municipality (as is the case in Cartagena, Colombia with

⁶ The case of Aguas de Barcelona’s ten-year contract in Havana, Cuba illustrates this case. The entire water services for the city are run on a mixed contract (public-private).

⁷ Many of the findings also dovetail with the work of the OECD as described in *Private sector participation in water infrastructure: OECD checklist for public action* (March 2009); *OECD principles for private sector participation in infrastructure* (March 2007); and *Managing water for all: An OECD perspective on pricing and financing* (March 2009) – all available at www.oecd.org

⁵ See Marin (2009) p.8.

Aguas de Barcelona). In addition, as public utilities investigate innovative financing options, ownership can become more complex. For example, selling shares on stock markets in a case several years ago provided an opportunity for the São Paulo public utility, SABESP, to raise funds for capital expenditures. Similar approaches are being tried in Colombia (Canal Isabel II) and with Phnom Penh Water in Cambodia. These arrangements have seen some success, but they also complicate lines of accountability between public utilities, shareholders and customers.

Certain countries are more engaged in PPP contracts than others. For example, China, Russia, parts of eastern Europe and Colombia are expanding the use of PPPs, while certain South American countries (such as Bolivia and Venezuela) are opposed to any type of PPP arrangement. However, in general, there has been a global shift away from concession contracts⁸ towards contracts with less expected financial investment, such as affermage-lease and management contracts with clear performance-based incentives. Although there is less investment in these arrangements from the private sector, the number of people being served through these PPPs is increasing.⁹

“You’ll see that there are an increasing number of PPPs but the amounts invested are decreasing. This is because there are now more affermage and management contracts and fewer concessions. However, if you look at the population figures of those served by all types of contracts, you will see that there is an increase in the number of people being served. PPPs are still being used widely.”

⁸ Full divestiture was never really a mainstream option, with only two countries, United Kingdom and Chile, using that approach.

⁹ See Marin, P. (2009) and Owen, D.L. (2010). Pinsent Masons *Water year book 2011*. Issued November 2010. At <http://wateryearbook.pinsentmasons.com/>

New Generation Contracts

Many of the more recent PPPs are 3-5 year management contracts such as those in Ghana, Algiers, Armenia and Johannesburg.¹⁰ In these arrangements, the ownership and asset management remains with the public authority and the private sector brings in specific expertise to increase efficiencies, enhance management structures and build capacity. In some cases, the contracts simply act as a stimulus for change and open the door to new approaches. The contracts may be specific to only one part of the delivery chain. For example, in Jordan the private contract was focused only on improving billing and collection ratios.¹¹ In other instances, the PPP may involve broader reforms, such as the recent PPP in Ghana. Management contracts may be favoured by private sector financiers as less risky in the face of economic uncertainty, political instability and currency devaluations. However, whilst financial investments may be lower, management fees may involve a high degree of risk, depending on how comprehensively linked they are to improvements in performance. In other words, the level of financial risk could still be significant depending on how incentive payments are structured and how much of the contract is based on fixed fees.

Growing interest in establishing management contracts between public entities has seen well-performing public operators engaging in management contracts to improve the performance of another public operator. Existing examples include the current management contract between Vitens Evides International and the national operator in Ghana, as well as current discussions taking place between

¹⁰ Perhaps the most successful of these has been in Algiers, where in 3-4 years Suez has succeeded in going from acute water scarcity to 24/7 service delivery with significant transfer of know-how and training.

¹¹ A similar contract delivered significant improvements in Burkina Faso (with ONEA). See *Corporatizing a water utility* (March 2010) at www.ppiaf.org.

Phnom Penh Water in Cambodia and Vientiane in Laos. When structured correctly, these approaches have offered opportunities to build capacity in key management areas.

Management contracts, however, do have several limitations that restrict the type of reforms that are possible. Such contracts are often structured to bring about rapid changes and “quick wins” over a 3-5 year period and have tended to focus on easier reforms, such as information systems or billing systems. In some cases, for example in Algiers, this has included “transfer of know-how objectives”, aimed at developing competencies and tools to guarantee more effective long-term management of services. In other cases, they may not include substantial institutional reforms such as management restructuring, staff training or long-term investment planning which are often required to support the long-term sustainability of utilities. In this respect, management contracts limit the authority that the private operator has over the operation of the utility during the contract. Even if they are structured over a longer time frame, the private operator is unlikely to have political authority over decisions that might be crucial to improving performance. Furthermore, a more critical issue is whether any improvements brought about by the contract will be sustained once public management returns. Some have suggested that the governance situations for public utilities, (for example in Johannesburg), have deteriorated after the end of the management contract.

“We all want to get quick wins but the preference for the private operator should be on longer contracts to improve the investment cycle.”

“You can’t just chuck money at utility reform and then run. It is a long-term approach. Ten years may not really be enough... what you really need is 20 years.”

“Management contracts are difficult because they do not allow one to hire and fire people and prevent [the management company] from having authority over the operations of the utility, making it very challenging to improve performance.”

Because of the limitations of the management contract, i.e. less control on the part of the private operator, affermage-lease contracts are sometimes favoured. Under these contracts, the private operator has more autonomy to make substantial improvements aimed at management efficiency within the utility. However, the private operator also takes on more risk as the revenues generated are shared with the public owner (who remains in charge of investments). The termination of several affermage-lease contracts during the 1990s resulted in a greater understanding of what is required to make these contracts viable.¹²

Second generation contracts are now more sophisticated in their adaptation to local political contexts and include more complex targets to ensure improved performance, building on affermage contracts, for example, the affermage contract in Senegal that included specific incentives added to the remuneration formula. Two parameters were included in this contract: non-revenue water and bill collection efficiency, which provided an emphasis on overcoming operational constraints. The extent to which these were met directly affected the

¹² In Mali, the concession contract signed with Saur in 2000 for Bamako and 16 urban centres was terminated by Saur in 2005. In Tanzania, the Dar es Salaam lease contract signed with Biwater in 2003 was terminated by the Government in 2005. In Mozambique, the lease contract signed in 1999 saw the operator leave in 2001 (Marin, 2009, p.62).

remuneration of the private company.¹³ Further advancements on the Senegalese contract include an affermage-lease contract signed in Cameroon (in 2007)¹⁴ and a small town affermage arrangement in Niger.

Performance-Based Contracts

Performance-based indicators are an important means of ensuring that contract obligations are being met. Interviewees suggested that performance-based contracts hold great promise for a range of stakeholders. For example, if designed correctly, they can assist in ensuring that service improvements reach marginalised and poorer communities. Reduced revenues in poorer areas contribute to private sector reluctance to expand into these areas. Performance-based contracts can overcome this by building in financial incentives to ensure that services are delivered more equitably across all income groups.

“The poor were not really incorporated directly into the first contracts. Now you have clauses that state how you address the poor with specific targets linked [for example] to OBA funding mechanisms.”

Performance-based contracts and approaches, originally introduced in the mid-1990s in the power and electricity sector, still offer great potential for improved service delivery.¹⁵ However, in many instances, it is too early to assess how effective they will be in the longer term. Experience from other public service sectors, highlights two inherent problems that could occur when service delivery is based

¹³ Brocklehurst, C. & Janssens, J.G. (2004). *Innovative contracts, sound relationships: Urban water sector reform in Senegal*. World Bank Water supply and sanitation sector board discussion paper series no 1.

¹⁴ The contract also includes innovative output-based aid mechanisms. See Marin, P., Loening, E. & Drozd, J. (2010). *Subsidizing water connections in Cameroon: How to apply output-based aid to an affermage*. OBA Approaches. July 2010, Note Number 34.

¹⁵ Interviewees mentioned Ho Chi Minh City in Vietnam, ONEA in Burkina Faso and Karnataka, India in particular.

predominantly on performance targets: These are characterised as “reactive subversion”, such as hitting the target but missing the goal, or reducing performance where targets do not apply.¹⁶ The first occurs when indicators are selected that might not actually be a true measure of the desired performance standard. As a simple example of a poorly designed contract (adapted from real cases), a performance-based contract could require that a set number of water delivery points be built. Achieving these targets could be linked to donor funds so utilities are incentivised to shift resources away from the public engagement team to ensure that more water points are built. With attention to community participation inadequate, community vandalism and rejection of the project could result.

Reducing performance where targets do not apply relates to how actors respond to measured indicators. Evidence from other sectors shows that providers will change their focus depending on what data is used to license, regulate or oversee them. This can have positive outcomes but it can also lead to the neglect of certain areas that are more difficult to measure. For example, if performance is measured on easily quantifiable indicators, such as how many connections are obtained or the number of meters installed, other areas that are more difficult to quantify may be neglected, such as how customer complaints are addressed or how community engagement and awareness is undertaken. Whilst this problem is generally acknowledged in the water and sanitation sector, as performance contracts become more mature, these impacts will need to be carefully assessed to

¹⁶ For examples from other sectors see Bevan, G. & Hood, C. (2006). What’s measured is what matters: targets and gaming in the English public health care system. *Public Administration*, Vol. 84 (3):517-38. See also: Bevan, G. & Hamblin, R. (2009). Hitting and missing targets by ambulance services for emergency calls: Impacts of different systems of performance measurement within the UK. *Journal of the Royal Statistical Society*, Vol. 172(1):1-30.

ensure that achieving the contracted performance targets actually results in improved service delivery.

BOTs (Build-Operate-Transfer)

Recent years have seen a significant growth in the number of BOT (build-operate-transfer) contracts for discrete infrastructure projects, such as wastewater treatment plants and desalination plants. These types of projects require significant capital investment but are favoured by the private sector because they present a narrower range of risks for companies. The projects are focused on a single client rather than utility operations that require ongoing engagement with multiple consumers and stakeholders. The schemes remove the private sector from direct contact with the consumer and it is easier for the private sector to obtain financing as they can predict “whole life costing” more easily, in part by obtaining water purchasing agreements with public utilities. BOTs also assist public utilities in meeting ever more stringent environmental standards for treating wastewater. Recent contracts in Canada suggest new forms of public-private partnerships for these kinds of infrastructure, seeing the private sector in less of a management and decision-making role but contributing technical and operational expertise on a performance-based basis.

“Environmental standards are getting more stringent and utilities are famous for not treating wastewater. This can be dealt with through a BOT with a private concession. The company builds the wastewater plant and they are paid based on the amount of water that is treated. All the network and pipes are still managed by the utility. The company bills the utility and they don’t have to deal with the customers.”

A build-operate-transfer (BOT) arrangement is a good way of obtaining efficient delivery of bulk services with private investment. It is, however, not a good solution if distribution systems are in bad shape and operating companies perform poorly. If problems relate to poor distribution performance, a BOT is unlikely to remedy this - and may even aggravate it by draining resources away from other supply-side constraints. Financing gaps for distribution rehabilitation / improvement works need to be bridged first as these have implications both for the success of a PPP contract and the optimal use of capacity investments (treatment plants, transmission mains, bulk distribution).

Financing¹⁷

In the 1990s, the lack of inexpensive finance was recognised as a key challenge for the public sector. In part this was due to various financial crises, but also due to fatigue in lending to sectors that were not making the expected gains in efficiencies and service delivery more generally. The private sector was therefore seen as a means of mobilising funds to secure financial investment in the WS sector. The private sector was also targeted to provide other benefits such as increasing efficiency and improving service quality. World Bank statistics show that the private sector has contributed to improved service delivery (Marin, 2009), but there is general acknowledgment that the financial investments were overstated and not fully

¹⁷ See *Sound financing mechanisms and risk management: Guidance note* (March 2011), which accompanies the implementation guidelines available at www.bpdws.org or www.partnershipsforwater.net

realised.¹⁸ The private sector has not delivered the financing that was anticipated in the 1990s. Parts of Eastern Europe continue to see the private sector as a potential source of funding for infrastructure development but, overall, there is an acceptance that long term financing for infrastructure is not likely to be easily brought in by the private sector.¹⁹ Consequently, the water and sanitation sector continue to face challenges in securing adequate financing. One aspect of financing relates to foreign currency risks and whether these are borne by the state or the company. However, increasingly private sector firms are able to access local currency for investments. Multilateral finance institutions are also exploring different forms of guarantee to local banking systems to allow for longer term investments.

In Africa, China is increasing its investment in water and sanitation infrastructure. Concerns have been raised, however, that this financing generally does not come with the necessary management reform and restructuring required to bring about improved service delivery.

"In the 1990s, the World Bank favoured private sector involvement because they offered, firstly, mobilisation of funds, secondly introduction of business efficiency and, thirdly, know-how and diverse experience. There has now been a shift. Mobilisation of funds was not realised but two and three have, by and large, been realised."

"From the Bank's perspective (EBRD), the

¹⁸ According to various sources including Marin, foreign direct investment through the private sector between 1991 and 2000 was approximately US\$43 billion, which compares favourably to calculations of US\$40 billion invested in water and sanitation through Official Development Aid (ODA).

¹⁹ As noted by the OECD in a launch of a publication at the Istanbul Fifth World Water Forum, three sources of revenue can help to close the financing gap: tariffs, taxes and transfers. Loans and bonds will need to be paid back and mainly serve to "bridge the gap" by helping to cope with large upfront investment costs. See OECD (2009). *Managing water for all: An OECD perspective on pricing and financing-Key messages for policy makers*. Available at www.oecd.org

main benefits of private sector involvement are in the efficiency gains and not in the financing benefits. We often do quite a lot of education of the public sector to help them understand the benefits of private sector involvement and to communicate that the financing is not always realised."

The Challenge of Tariffs

In part, financial challenges relate to the political and ideological backlash which emerged in the 1990s. This created political sensitivity towards increasing tariffs for water services and this continues to undermine service provision in the sector. While there have been instances where the private sector has requested seemingly unwarranted tariff increases, interviewees clearly suggested that there are more cases where increased tariffs have been justified and supported by stakeholders but refused because of political interference.

"...we had the institutions in place but there was no investment so that is why we are not seeing improvement in services. We have also been able to ensure that there are increases in the tariff. Tariff increases have been successful which was needed but we need more to improve the infrastructure."

"Tariff level affordability is the main issue for private sector investment...Increasing tariffs is not so much about affordability but more about political resistance...to use cross-subsidies to cover costs."

Several interviewees suggested that other infrastructure sectors (such as electricity, transport and telecoms) are more open to the efficiency improvements that can be brought in through private sector involvement. However in the water sector, political dimensions continue to hold back similar trends, with an impact on the level of investment private sector actors across the spectrum are prepared to commit.

Consequently, the sector now requires more creative financing options to overcome low tariff levels and a backlog in infrastructure development and maintenance. Other reports provide a useful analysis of these emerging options and outline opportunities

to mobilise “market-based repayable financing (such as loans, bonds and equity).”²⁰

“Water is the most difficult because people don’t want to pay for it. Electricity is different as people accept that they have to pay for the service but I still have meetings with ministers and they say that water is from God and that no one should pay for it.”

Innovative Financing Options

Future financial investment for the WS sector will need to be channelled through the public sector and a key challenge for the sector is to find innovative ways to combine public funding with private sector expertise. Financing for capital investments are less easily accessed through the private sector.²¹ Utility managers are experimenting with different approaches to accessing repayable bridging finances. Examples include output-based aid, blending grants and repayable finance, microfinance, guarantees, grouped finance vehicles, direct lending, equity, credit ratings and project preparation facilities. The financial recession has further constrained opportunities to obtain financing, creating even more difficulties in securing the limited financing options that were available prior to the crisis.

“To secure commercial viability of the sector, you need to secure finances through the options of taxes, transfers and tariffs. You have to get the mix right. If you don’t get that correct, then you cannot secure the financial viability of the sector and there is no way that you can attract the private sector until you get that right.”

“OBA is providing public subsidies for private operators – that has not been done much before. Now we need to figure out how these alternative models work where there is mixed ownership.”

²⁰ See OECD (2009). *Managing water for all: An OECD perspective on pricing and financing - key messages for policy makers*. Available at www.oecd.org

²¹ See OECD (2009) and also WSP and PPIAF (2009). *How can reforming African water utilities tap local financial markets? Insights and recommendations from a practitioners’ workshop in Pretoria, South Africa, July 2007 (Revised in 2009)*.

One possible direction for securing private investment is through the issuance of municipal bonds or water and sanitation utility bonds. In 2008, a PPIAF-African Development Bank-funded study assessed the regional credit-worthiness of seven African water utilities. The study examined size, efficiency, debt and liquidity measures, and detailed credit protection measures of the utilities. The findings document the financial sustainability of the utilities, and set the stage for their entry into international capital markets.²² Bond finance creates another stakeholder, bond investors, who place pressure on managers to contain costs and meet (reasonable) customer quality expectations. Below-cost pricing by many water utilities probably makes this unfeasible, but some utilities are on the verge of financial sustainability, which may make this a viable option. Of course, if the issuance of commercial grade bonds reduces or eliminates other sources of funding (from multilateral organisations), utilities are likely to delay this step towards expanding capital sources. This means that the beneficial discipline of capital market pressures would be lost.

More than Just Financing

Although lack of financing is a key constraint for the sector, financing is not in any case sufficient to bring about the required reforms. In many cases, the sector is so starved of fresh capital injections that any additional financing might bring about a level of service improvement. However, to ensure long-term financial sustainability, whereby these initial improvements are not negated by the absence of management reforms, utility operators need more expertise in financial planning and asset management. The private sector can offer

²²Joffe, M., Hoffman, R. & Brown, M. (2008). *African water utilities regional comparative utility creditworthiness assessment report*. Water and Sanitation Program-Africa Region. Available at: www.wsp.org/wsp/sites/wsp.org/files/publications/Africa_Water_Uilities.pdf

assistance here, often implemented through various kinds of PPP arrangements. There is also a need for more expertise in public financial management, including the political dimensions of public budgeting, ring-fencing taxes and public accounting for expenditure. The emergence of public-public management contracts may assist utilities in strengthening capacity in these areas. However, these arrangements also need to be looked at quite carefully to ensure that their contribution is sustainable and that the recommended reforms are suitable for the local context, rather than the situation in the supporting public sector organisation.

“Ministries often need more public finance expertise. They have new policies and functions on paper but they don’t have the staff or the skills to perform these functions.”

“It is not just about raising the tariff but in making sure that the money is invested in the correct places.”

Regulation²³

As more comprehensive and sophisticated contracts evolve requiring new ways of measuring PPP performance, there is an increasing need to establish regulatory mechanisms to monitor compliance.²⁴ The form of regulation varies greatly in both the model applied and the instruments used. Several interviewees suggested that, whilst there continues to be the perception of two models: regulation by contract (based on the French model) or regulation through an independent regulator (based on the Anglo-Saxon model), the challenge is increasingly focused on how best to blend the two

²³ For more information and case studies on regulating PPPs, particularly around services for the poor, see: Franceys, R. & Gerlach, E. eds. (2008). *Regulating water and sanitation for the poor: Economic regulation for public and private partnerships*, Earthscan Publishers: London.

²⁴ For a comprehensive discussion on how regulation is defined, including the different use of the terms in French and English see: Trémolet, S & Binder, D. (2010). *The regulation of water and sanitation services in developing countries. Literature review, insights and areas for research*. A Savoir. Agence Française de Développement.

approaches. Instruments can include statutes, contracts, licenses or executive orders.²⁵ Regardless of the model or instruments used, sound regulation is defined as including the following criteria: clarity in the distribution of roles, autonomy, accountability, participation, transparency and predictability.²⁶ The research highlighted several reasons why water and sanitation regulation in developing countries continues to fall short.

Firstly, there are complex political dimensions that hinder the establishment of effective regulation. When regulation was first introduced in the 1990s, there was a sense that it would just happen when a law was passed. The process of transferring decision making powers to a separate agency, however, requires a shift in political power, which is often underestimated in terms of the time and resources required. Many of the initial regulatory bodies failed because donors underestimated the political shifts that need to occur when governments transfer decision-making powers to a separate entity. These power shifts do not happen quickly, and they are unique to each country and its political process, but they are an essential step in creating effective infrastructure regulation. This political dimension continues to result in the ongoing lack of autonomy that many regulatory agencies experience. Successful regulatory bodies are those that have overcome these political challenges and have used legal and political processes to create autonomy, whether they are regulating public or private operators.²⁷

²⁵ For further explanation on these instruments see: Groome, E., Halpern, J. & Ehrhardt, D. (2006). *Explanatory notes on key topics in the regulation of water and sanitation services*. The World Bank water supply and sanitation sector board discussion paper series.

²⁶ Trémolet, S & Binder, D. (2010). *The regulation of water and sanitation services in Developing Countries. Literature review, insights and areas for research*. A Savoir. Agence Française de Développement.

²⁷ Several interviewees suggested (and Marin, 2009 also notes on pps. 146-7) that the PPP processes in

“The regulator must be autonomous. The reporting structure is one of the key reasons why NWASCO in Zambia functions as it does. In the case where there is no independence, it becomes a mess.”

“In the 1990s, governments and donors thought that they could just pass a law that says ‘we will establish a regulator’ and then expect it to happen. It just does not work like that... We did not really understand the complexity of establishing these organisations. It takes time for politicians to release power from these strategic areas. You can’t do it overnight.”

Secondly, the regulatory approaches that have been effective so far are those that have been hybridised and adapted to meet the local context. For example, in Senegal the affermage contract does not follow the traditional French model but has been adapted to meet local conditions and includes two performance management contracts in addition to the affermage contract. In Zambia, the independent regulator was structured using lessons learned in the UK, Bolivia, Chile and Australia. Both cases have been successful because they reflected the reality that operators in developing countries face very different challenges to those faced by operators in developed countries. In establishing new regulatory agencies and instruments, there may be a tendency to transfer models from areas that have had some success (i.e. Zambia, Mozambique, Senegal, Chile). Such an approach is unlikely to yield success.

Thirdly, regulation is hindered by a lack of information upon which decisions should be made. Regulation will be ineffective if it is not based on accurate performance information. An accurate database on the status of the network (including existing connections, water quality, billing ratios, etc.) is required before progress can be monitored and achievements rewarded or penalties imposed. This requires the

many countries have contributed to more widely applied regulatory approaches that change the way that public water utilities are viewed.

establishment of monitoring protocols and trained staff that can implement these protocols. In many countries, baseline information that may be essential to the sector (such as population growth, income levels, water demands, etc.) is difficult to obtain, particularly in poorer areas such as large urban slums. This poses technical challenges in setting up a monitoring database and is a particular concern where targets are set and regulated through contracts.

“Whatever the model, there needs to be separation from the information gathering and contract enforcement. In Niger and Cameroon, they had to appoint a neutral party to obtain the required information. Without that information, there was no basis for regulatory decisions.”

“The regulator can only do their job if they have good information on performance. This is how people understand how to move forward. So often utilities are forced to apply rules but there is no wider view on where they could go. Benchmarking performance is needed.”

Fourthly, regulatory authorities need to pay more attention to how they communicate and engage with stakeholders. There is a growing trend towards engaging consumers through report cards and surveys. Lessons can be learnt from emerging experiences in Tanzania, Mozambique and India (Bangalore), where customer satisfaction surveys are being used. More attention needs to be given to how this can be integrated into the regulatory framework, particularly in terms of how information is gathered from marginalised communities. Stakeholder engagement (discussed below) is a critical factor in regulating utilities, public or private.

“You need a regulator that is technologically sound and politically independent and able to survive. If you are able to get that, then you still need to make sure that your communication is clear. This is a key area that has to be done right.”

Finally, an increasing number of small-scale formal and informal providers are

recognised as making a contribution but have traditionally not been the focus of regulatory models. In Mozambique, smaller providers have been brought into the formal sector through contracts with the major utility, and are thereby subject to regulation as subcontractors. In Ghana, authorities have implemented a “light-hand” approach to the regulation of tankers that provide water to urban and un-served areas. Whilst, by definition, regulating small scale providers is difficult, the emphasis is on finding a way to regulate these providers without stifling the contribution that they make to the sector.²⁸ Without any regulation of their activities, one interviewee suggested that this “clearly results in a true privatisation of the service, potentially at the expense of the population.” This perspective is a dramatic shift from the 1990s when informal providers were often seen as “illegal” and harmful, presenting a challenge to other “proper” service provision options. There is now an acceptance that the backlog in current water and service provision will see informal providers continuing to provide vital services to certain communities for many years to come.²⁹ The shift in focus is to find effective and appropriate ways to support and regulate these services, rather than limit their involvement in service provision.

²⁸ For an example of regulation of small scale providers, see Avrillier, P. (forthcoming) *The Regulation of small scale water providers in Laos*.

²⁹ See Kariuki, M. & Schwartz, J. (2005). *Small-scale private service providers of water supply and electricity: A review of incidence, structure, pricing and operating characteristics*. World Bank Policy Research Working Paper 3727, October 2005 and Valfrey-Visser, B. et al (2006). See also: *Access through innovation: Expanding water service delivery through independent network providers*. Considerations for practitioners and policymakers, London: BPD, November 2006 available at www.bpdws.org

“...we don't have many good examples of regulators that can deal with informal operators. You need a new type of regulatory framework for these providers.”

“There is now a mindset change about how we include the informal providers rather than denying that they exist. In the 1990s, the approach was that the water utility is the main provider and everyone else is illegal. Now there is more understanding that they exist and they will continue to provide a service to a large part of the population so we are going to have to find a way to make them part of the solution.”

Stakeholder Engagement³⁰

The failure of a number of PPPs in the 1990s has been attributed to a failure in effective engagement with stakeholders (including customers, civil society, trade unions). Many argue that PPPs failed because stakeholders were not involved in key decision-making processes, such as tariff increases and concession area demarcation. Instead, stakeholders were the target of communications or public relations campaigns rather than the, admittedly more challenging, use of dialogues and engagement channels. Some of the more controversial PPPs might have been less risky if such engagement had been designed and implemented from the start with a more responsive process put in place.

“Even the controversial case of Cochabamba is an example for how something fails because of a lack of stakeholder involvement. If users are involved in tariff decisions and if they see improvements in services, they will accept the decision. Many difficulties could be avoided through proper preparation and dialogue from the start.”

Many lessons have been learnt from past experiences and stakeholder engagement is becoming a more integrated part of many infrastructure projects. Stakeholders are demanding more transparent information

³⁰ Please see Poverty Responsiveness: Guidance Note (March 2011) which accompanies the Implementation Guidelines available at www.bpdws.org or www.partnershipsforwater.net.

on service levels and tariff increases. Many major private companies are becoming more aware of the importance of transparency. However, gathering information from public utilities, in many instances, can present a greater challenge because the information may not be collected or it may be blocked for political reasons. Many governments, particularly in Latin America, have taken over failed PPPs from the early 1990s (e.g. in Argentina and Bolivia). For political reasons, there is now reluctance to release more recent information on whether these utilities have achieved improvements in service levels. This lack of information makes it very difficult to compare the effectiveness of different models.

If the water sector is truly committed to pragmatic service delivery, all utilities, regardless of ownership or contractual arrangements, should be forced to release information on service standards. Governments have ended contracts with private companies for not meeting contract requirements but it is much harder to penalise government-run utilities when they do not meet the same performance standards.

“For the last 10 years in Bolivia and Argentina, most of the water utilities have been re-nationalised. What has been the impact of this in terms of efficiencies? Under private management, there was a lot of pressure to release information on performance but now they do not release information. You can’t monitor performance because it is too political.”

Stakeholders need to be exposed to different types of tools that build more accountability between users and public utilities. These tools include customer surveys, participatory budgeting, advisory body membership, legal recourse and redress.³¹ In most cases a suite of tools is required that

³¹ For a detailed explanation of how these tools can be used to build more accountability in the sector, see Muller, M., Simpson, R. & van Ginneken, M. (2008). *Ways to improve water services by making utilities more accountable to their users: A review note*, No. 15, Water Working Notes.

meets the needs of all users, with specific tools required to meet the needs of women, minority groups and the poor.³² More work is required to assist stakeholders in accessing these participatory opportunities and thereby making service providers more directly accountable.

“To have good management of a network you have to ensure that there is ownership by the community. You have to have good information, good transparency and consultative decision-making processes.”

Other Emerging Trends

In addition to the trends outlined above, three additional aspects emerged from the interviews as areas where PPPs are seeing particular growth.

Increasing Involvement of Local Private Sector Companies

In comparison to the dominance of multinational companies that characterised the PPP landscape in the 1990s, there is now a growing focus on engaging local companies. In 2007, it was estimated that 42 percent of the population that were being served by the private sector were from “home-grown” companies that were based in developing countries rather than foreign companies that are/were required to establish local companies as their subsidiaries (Marin, 2009). These companies present an opportunity to create long-term, local capacity for the sector.³³ External providers may be required to bring specific skills but local providers may offer longer term commitment and sustainability. Local providers are also more in tune with the political climate and are better equipped to hybridize models to suit political and economic conditions.

³² See www.partnershipsforwater.net for one such set of tools.

³³ Some have speculated that foreign operators have been most successful where they have localised the management teams most rapidly, thus being seen more as a national rather than foreign company.

“Private operators from developing countries are replacing developed country operators. 40% of the whole market is now delivered by national operators compared to 10 years ago.”

“Creating local capacity and supporting the emergence of the local private sector is the only way to achieve sustainable and affordable provision.”

Increasing Interest in Rural Areas and Small Towns

There is growing interest in building more PPP involvement in smaller towns and rural areas as demand for improved services grows in these areas. Many municipal managers are overwhelmed by a range of service delivery responsibilities and are more open to delegating functions to others. In addition, smaller towns may be less likely to suffer political interference from the national level. However, in many rural areas and small towns, traditional infrastructure is more costly to install as homesteads may be more dispersed, challenging economies of scale, and income levels are lower. Municipal managers also often lack the skills and knowledge to manage such contracts. To expand services to these areas, PPP approaches would need to evolve to overcome these challenges, making it attractive for the private sector but also manageable for local authorities.

“There’s a market for the private sector to go into smaller places where there is demand and they can develop business there. They are not that conspicuous politically and no-one’s paying much attention to them so they can more easily manage in that situation.”

Sanitation and Wastewater Treatment

Generally speaking, wastewater treatment and sanitation have traditionally been less of a focus for PPPs. However, with increased, and in some cases renewed, interest in wastewater reuse and its associated products such as fertilisers and biogas, wastewater is no longer seen as a burden but as an opportunity to harness a range of

new products.³⁴ This is attractive to the private investor and presents opportunities to bring more investment into the sector. These technologies are of particular interest in Latin America where less than 20% of wastewater is being treated.

“The major area of interest is filling in the gap of wastewater treatment. In Latin America, less than 20% of wastewater is treated and it’s now a major issue. Governments don’t have the money to deal with it so there will be a large market for private operators. There are real investment needs there.”

In many developing countries, particularly in Africa, the focus for private sector investment in sanitation should be on small-scale sanitation solutions. Due primarily to their cost and resource requirements, water-borne sewer systems are not going to be able to meet the sanitation needs of many African communities for several decades. There is currently insufficient capital to install expensive sewer systems in large urban slums. To overcome this, the private sector has an opportunity to work with utilities and local entrepreneurs to develop and market off-grid sanitation services. These local solutions present viable, non-monopolistic business opportunities for the private sector.

“If we stop and think about universal coverage, it is not going to happen through sewer systems. Systems should be marketed through social entrepreneurs. It needs to be a market where entrepreneurs sell their toilets and create a business model.”

Conclusion

The emerging PPP landscape, as described in this document, requires new approaches to contracts, financing, regulation and stakeholder engagement. Some key factors need to be taken into account.

Public utilities remain the predominant service provider in developing countries.

³⁴ See Gasson, C. (2010). Making sludge sexy, *Global Water Intelligence*. Vol 11, Issue 9. September 2010. <http://www.globalwaterintel.com/archive/11/9/analysis/making-sludge-sexy.html>

However, the private sector can play a valuable role in reforming public utilities so that they can more efficiently deliver services that are financially sustainable, transparent in terms of associated delivery costs, and linked to appropriate accountability mechanisms.

Also important is that, even with only a few private providers in a country, the presence of these providers can result in a change in discourse around accountability of the sector as a whole. Thus, the impact of PPPs can be felt well beyond the actual project or municipality that holds the private sector contract.

Over the last ten years, many lessons have been learned about how best to shape management contracts and affermage-lease contracts. The institutional arrangements that govern these contracts continue to evolve to meet political and institutional contexts. As the landscape of PPPs continues to shift rapidly, there will need to be continual reflection and sharing of experiences on how best to shape these contracts. Some have questioned whether this space (once led in particular by the World Bank) currently exists in the WS sector.

Performance targets are evolving as a key focus of PPP contracts. While these hold much promise, lessons from other public service areas illustrate that meeting performance targets does not always guarantee improved service delivery. More analysis is required to understand how performance targets shape delivery in the water and sanitation sector.

The political dimensions of the water sector continue to pose challenges to achieving cost recovery. The sector needs to develop innovative financing mechanisms that are suited to the blurred boundaries between public and private institutions. The financial crisis has necessitated a more urgent assessment of how the sector can secure additional investment.

Establishing sound regulation continues to be a major challenge for the sector. While many factors pose a challenge to regulation, such as political interference, a clear priority is establishing how best to obtain accurate data that is needed to design performance-based contracts and drive regulatory decisions. Establishing monitoring protocols, developing accurate baseline datasets and implementing appropriate IT systems to support this should continue to be an emphasis for the sector.

Finally, stakeholder engagement is vitally important for effective WS service delivery. In the past, stakeholders have rightly demanded that private companies meet their promises to improve service delivery across all income groups. With the public sector dominating service delivery, there is a recognised need to develop tools that keep public institutions equally accountable.

Unlike in the 1990s, proposed mechanisms for improved infrastructure now seem to be driven more by pragmatism than ideology. Although the water sector is somewhat behind other infrastructure sectors, there is a growing sense that the focus for service delivery should be shifted towards understanding what works best within limited budgets. To achieve this, the sector needs to focus on gathering and communicating performance information and providing stakeholders with tools to keep all utilities (public, private and everything in between) more accountable to their service delivery promises.

About This Document

This background document is part of a wider exercise to support policymakers and practitioners in finding appropriate tools for the design of institutional arrangements that meet the needs of poor communities. The Policy Principles, Implementation Guidelines and Assessment Tool (originally created by a consortium of the SDC, SECO and Swiss Re) are one such set of tools that are available at www.partnershipsforwater.net

About BPD

BPD's goal is to enhance and increase water and sanitation provision in poor communities by strengthening partnerships. Challenges around water and sanitation service delivery in developing countries are not primarily rooted in gaps in technology or finance. BPD promotes more efficient and effective relationships between stakeholders across the public, private and civil society sectors. Active since 1998, BPD is the sector leader in providing non-profit, neutral and independent guidance that both challenges and supports policymakers and practitioners. We do this through action research, direct support, and learning events and activities.

About the Authors

***Aileen Anderson** is an independent consultant with ten years of experience in the natural resources and infrastructure sectors, including water supply and water resource management. As principle scientist for a leading consulting firm in South Africa, she managed several water management projects for the South African Government. She is currently the Ramsar Convention on Wetlands invited expert on energy issues. She is a Chevening Scholar with an MSc in Public Management and Governance from the London School of Economics and Political Science (LSE), where she won the award for best thesis, and an MSc in Natural Resources and Environmental Studies from the University of British Columbia.*

crossflow
CONSULTING

www.crossflowconsulting.com

***Jan Janssens** retired in 2008 from the World Bank, after fifteen year of service. He is now Managing Director of JJC Advisory Services, a Swiss-based consultancy firm. His main area of expertise is strategic advice and capacity building on water sector institutional reform, water utility development and public-private partnerships (PPPs). Mr. Janssens has over 35 years of professional experience in the water and sanitation sector, including projects carried out for the World Bank, the European Investment Bank, and, local actors (governments, public and private operators) and has worked in Sub Sahara Africa, Northern Africa, the Middle East and Asia.*



Supported by but not necessarily representing the views of:



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs FDEA
State Secretariat for Economic Affairs SECO



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

BPD Water and Sanitation
2nd floor, 47-49 Durham Street
London, SE11 5JD UK
Tel: +44 (0)20 7793 4557
info@bpdws.org/www.bpdws.org