

## **Improving the balance between regulatory independence, accountability, decision-making and performance**

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This paper relates to a presentation given in April 2007 to the African Forum for Utility Regulators (AFUR). Governments in Africa wish to improve their country's infrastructure but only have restricted public money for investment and limited access to private funds because:

*Investors are unwilling to invest, or will only invest at high cost, because they do not trust the regulatory regime*

The following discussion analyses the causes of this problem and explores potential solutions. It is divided into the following sections:

1. Background;
2. Lower discretion;
3. Increased effectiveness;
4. Improved governance; and
5. Summary and conclusions.

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## 1. Background

This section provides some background to the issues that will be discussed further in the paper, including:

- Causes and context of regulatory distrust;
- Possible solutions; and
- Relevance to state-owned companies.

Investors may not trust the regulatory regime due to the following factors:

- 1) The regulator is new and so lacks credibility because it does not have a track record;
- 2) The regulator is viewed as weak because of:
  - A poor ability to carry out tasks, possibly through inadequate technical skills or staffing; and
  - Even if the regulator is able to ‘correctly’ identify a desirable course of action, it may have insufficient independence to be able to follow it;
- 3) The regulatory regime is “high-level”, poorly developed, non-transparent and seen as discretionary, making long-term commitment difficult;
- 4) Regulatory decisions are perceived as either unpredictable or inconsistent; and
- 4) The regulator is “too” independent and faces no accountability or checks and balances.

However, the regulatory regime is trusted in some developing or transitional countries, or at least, more in some than in others. For example, China is currently the top recipient of Foreign Direct Investment (FDI) amongst developing countries while South Africa was the top recipient in Africa, accounting for 21 per cent of all FDI inflows in 2005 (UNCTAD 2006b and 2007). Further, a focus for investment flows in developing countries seems to be telecommunications, even in Sub-Saharan Africa (UNCTAD 2006a). So the generalisation that it is difficult for these type of countries to attract private funds does not always hold true.

Additionally, distrust in the regulatory regime is not restricted to developing or transitional countries — it is also found in Western Europe. The European Central Bank attributed the lower FDI in the EU compared to the US to the relative failure of Europe to open up and deregulate its services sector (ECB 2006). In addition, variants of this perception can arise with the regulation of state owned enterprises. Irwin and Yamamoto (2004) highlight the poor performance of government owned electricity businesses in developing countries but also the impact that improved governance structures within the companies can have when combined with regulation at improving the performance of these companies.

The solution must be to enhance the predictability and quality of decision-making, so investors can feel more confident that the regulatory outcomes are likely to consistently be the right ones. For some investors, regulatory decisions that are consistent, and not necessarily correct, would be viewed as an improvement. These ‘better’ decisions can be

achieved through a number of approaches that may be used separately or in conjunction with one another:

- 1) The discretion of the regulator could be lowered through:
  - Introducing contracts;
  - Enhancing rules;
  - Improving transparency and consultation; and
  - Creating more checks and balances or strengthening the existing ones;
- 2) The effectiveness of the regulatory agency could be improved by:
  - Better equipping staff;
  - Outsourcing; and
  - Implementing regional initiatives;
- 3) Enhancing the governance:
  - Creating within country committees to benchmark best practice and so act as a reference point; and
  - Implementing regional initiatives.

### **1.1 Relevance to state-owned companies**

These issues are also very important for a regulator that is responsible for state-owned companies. In a similar fashion to developing a relationship with the private sector, the regulator will need to build confidence amongst stakeholders. Although the management may be civil servants instead of private-sector individuals, they are likely to want to tap into private finance. The kind of mechanisms that have been discussed and will be explored further can also help to ensure that appropriate incentives are set for the management of state-owned companies, otherwise the purpose of regulating these businesses in the first place is arguably defeated. Further, these structures can play a key role in building customer confidence about the price and quality of goods and services provided by these companies now and into the future.

## **2. Lower discretion**

The first of the ways in which regulatory certainty can be strengthened is by reducing the discretion in regulatory determinations. This section considers four ways in which reduced discretion can be achieved. It does not, however, consider the issue of multi-year tariff determinations. As noted in Professor Jorry's paper, multi-year determinations are a good way of achieving commitment at least during the price control period.<sup>2</sup> However, many of the issues concerning commitment still arise since uncertainty about how the agency is likely to act at the end of the price control period may exist.

### **2.1 Contracts**

The first of the four approaches for achieving lower discretion involves the use of detailed contracts, which is often referred to as using "regulatory contracts" or "regulation by contract".

Contracts have been proposed as a solution to regulatory discretion for the following two main reasons:

- 1) the contract sets out the clear understanding between the two sides about price, investment requirements and other parameters; and
- 2) the contract provides a process by which disputes can be addressed.

However, the first reason is not always true. While contracts may work well for one-off or short-term projects, they do not operate so well for long-term or uncertain projects. Contracts provide a good framework for large capex projects such as IPPs, BOT and water projects which have a single major investment since the major costs are known in advance. They also operate well for short-term management type projects where the likely events for the next three to five years can be anticipated with a reasonable degree of confidence. However, their purpose is less clear for long-term uncertain projects, such as setting the parameters for distribution systems where investment or quality needs in five years' time are largely unknown, let alone for a 25 year period. For example, Manila Water is one of the two private companies responsible for water and wastewater treatment in the capital city of the Philippines and has what is perceived as a highly detailed contract but even there significant discretion is vested in a separate regulatory body (SAFIR 2001).

Since it is possible to write good short-term contracts could a series of linked short contracts be used rather than a long one? This would address the superficial issue of the fact that the investments being undertaken are long-term, often even in excess of 25 years, but creates new issues. Short-term contracts would create a concern about the treatment of the remaining value of the investments at the end of each contract,

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<sup>2</sup> A significant body of literature on the practical aspects of establishing multi-year price controls in data limited developing countries has arisen in the past five to ten years. See for example, Alexander & Harris (2001), Alexander (2003), Estache, Guasch & Trujillo (2003) and SAFIR (2004).

exacerbating an issue that even arises with long-term contracts.<sup>3</sup> Some attempts at using shorter-term contracts to complement longer-term ones were tried in Argentina – where periodic rebidding of 10-15 year “management” contracts within the much longer-term concession contracts was put in place. Further, when the Scottish water and sewerage BOT contracts were being designed in the 1990s there was an attempt at using seven year contracts with a mechanism for rebidding the contracts at the end of the seven years. However, this was dropped over concerns about the impact on remaining values and consequently traditional 20 year plus contracts were implemented.

Given this inability to establish what will happen in the future, the more important function for contracts may be the second reason — they can provide a process for solving disputes. This means that the contracts can set out procedures, which may cover process and substance, for how disputes will be addressed. Since the contract is a legally binding document this provides greater certainty to the investor about how any future dispute will be handled. Further, breaches of contract have a very clear judicial remedy and this also provides more certainty than if the regulatory agency alone were involved.

Nevertheless, even when the future cannot be known, some attempts have been made to establish hard rules for specific areas of regulation. Examples include the rules used to set the cost of capital by private water and wastewater treatment companies in Chile as well as those used to fix the rate of return for utilities in Latin America following their privatisation – see annex 2 for further information. However, while these rules remove discretion, their fixed nature also means that they can quickly become inappropriate. This may not be a problem for private investors if they know the rules before getting involved with a project and can adjust accordingly by bidding a lower price or a lower quality of delivery. This is possible since by knowing the rules the investor/company is able to establish what future income streams are likely. These can then be adjusted by the true cost of capital, incorporating the regulatory and business risks perceived by the investor, to determine a value for the business. So, if the Chilean rule set out in annex 2 provides an allowed return lower than the perceived actual cost of capital, then investors will bid a lower value for the business. Of course, for long-lived projects this still requires the investor/company to forecast what might happen in the future to some variables, but then some forecasting is needed no matter what the regime looks like.

Nevertheless, this seems an imperfect outcome (albeit better than that achievable with no “contract”), with private investors arguably having to compensate for regulatory failures. It would be better if there were an alternative solution. Such a solution may be offered by a greater focus on process to achieve decisions instead of specific answers to regulatory questions at the outset of the process.

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<sup>3</sup> If the uncertainty is too great then either investment will not take place or the companies will force prices up in an attempt to recover costs during the first known period. An example of this is provided by the “high” electricity prices in Cambodia charged by the small private producers – these prices reflect both the costs of producing and the fact that significant uncertainty about the life of the projects existed. See PPIAF (2002).

## 2.2 Low discretion rules

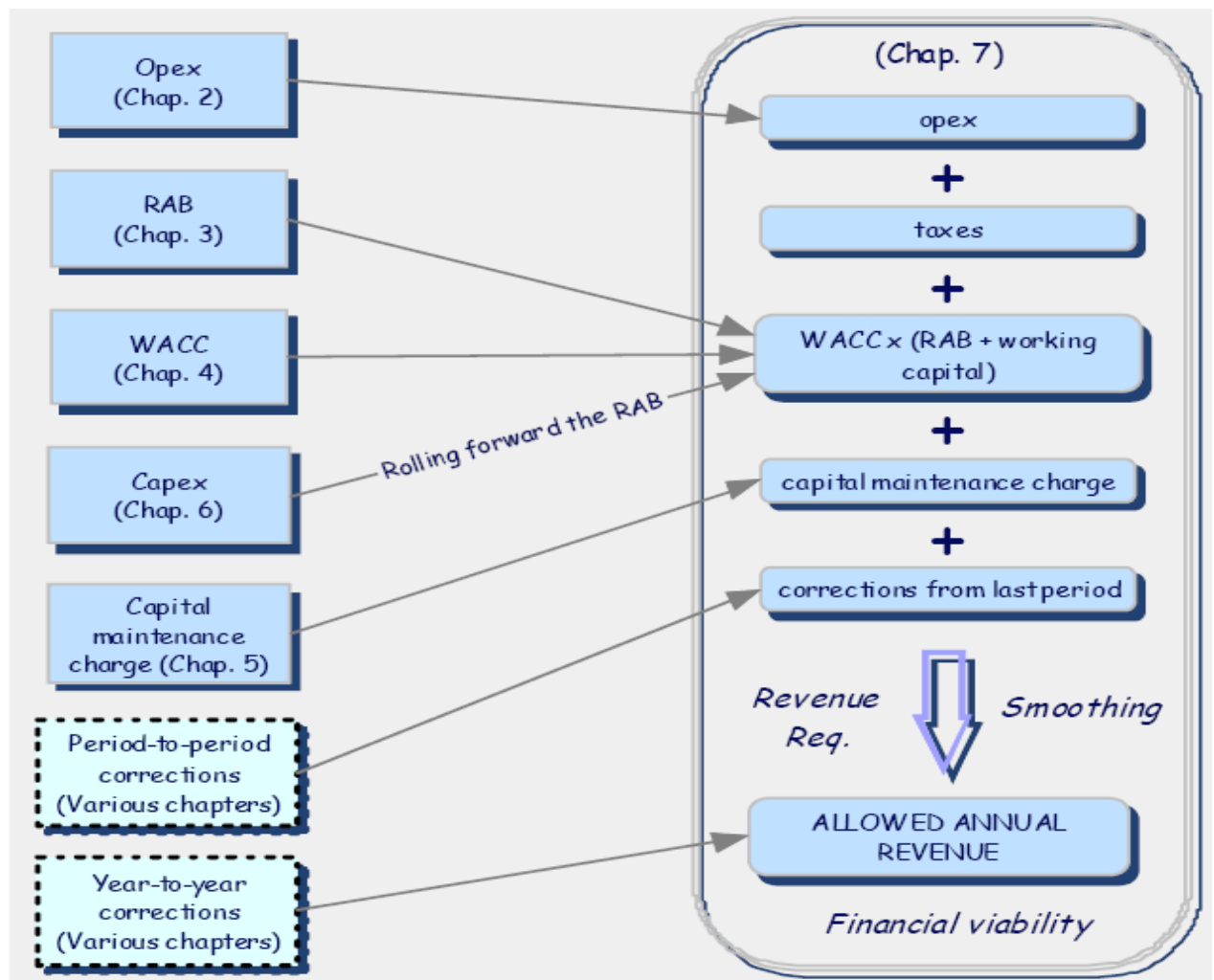
It seems that it is possible to create rules that lower discretion and yet respond to a changing environment. However, important technical considerations include the precision of the rules as well as where they should be enshrined, which seems to depend on the characteristics of the particular price setting process. Shugart and Alexander (2007) demonstrate how low discretion rules for tariff adjustment can be used to determine the cost of capital and the regulatory asset base (RAB – the value of assets on which the company is allowed to earn a return, see annex 1 for further information on the low discretion rules).

What would low discretion rules have to cover? All the elements of a price determination would need to be covered – shown in the following figure – since certainty about pricing requires removal of as much discretion as possible and having one element highly prescribed but discretion elsewhere would still leave the company uncertain as to what price it was likely to receive. Consequently, low discretion rules would need to be comprehensive and as exhaustive as possible.

The impact of this can be seen in the two examples provided in annex 1. The first example, related to the calculation of one part of the allowed rate of return (cost of capital) includes a provision to allow the rule to update and so remains flexible, while minimising discretion. Of course, the rule could be something as simple as using an expert panel, which is discussed further in Shugart and Balance (2005) – although the low discretion rules would, of course, have to explain how the expert panel was to be chosen, their remit etc. Whether the expert panel would then be allowed to choose their own methodology or have to follow one set out in the rules is less certain. However, some basic guidance would be expected, say expecting them to follow international standards, although more precision could be helpful. One use of experts in the draft water and sewerage low (or reduced) discretion rules, Shugart and Alexander (2007), is to use them when selecting comparators. In cases like that guidance is provided as to how they should undertake this role.

Definition of the RAB and the way it is updated is a major part of the regulatory regime – of great importance to investors since it defines how their investments will be valued. The second example in annex 1 is based on a ‘roll forward’ of the RAB approach, which again reduces discretion while having some elements that adjust to new information. This is, however, just one possible approach to handling investment. The draft low discretion rules include several other approaches and a more detailed explanation is provided in Alexander and Harris (2005).

*Figure 1: Coverage for comprehensive low discretion rules for price determination*



Source: Shugart and Alexander (2007)

### 2.3 Transparency

One of the key principles underlying AFUR’s Framework is encouraging greater transparency. Transparency helps improve the regulatory environment because it increases understanding of how and why particular regulatory decisions have been made, which arguably increases the perceived consistency of regulatory outcomes and creates an improvement in their predictability.

A related issue is whether additional transparency creates extra clarity about regulatory behaviour. This can be extremely important for elements of a regime where consistency is needed from one price determination to the next – such as the RAB. For example, companies (and investors) need to know how unanticipated efficiency, or cost over-runs, are going to be treated by the regulator. A clear statement of the way in which actual expenditure will replace forecast expenditure (the ex ante / ex post question in regulation)

is key to allowing the company to understand what incentives it faces, yet all too often, in developed as well as transitional and developing countries, this is not clearly set down.<sup>4</sup> Clarity including transparency about this sort of issue is important and the arguments as they relate to the RAB are set out in detail in Alexander and Harris 2005.

Increased transparency can incorporate greater consultation — the two are not mutually exclusive and neither imply lower discretion. For example, price determination is not just simple mechanical addition of cost elements and there is always likely to be more discretion in the way that elements are combined, especially given the lack of precision with which robust efficiency factors or allowed rates of return can be established.

## **2.4 Checks and Balances**

A pre-requisite for good regulation is ensuring that appropriate bounds to discretion exist. In other words, it is necessary to have some form of regulation over the regulator – this also ties into questions about how to improve regulatory governance.

There can be checks or balances governing process as well as substance, each of which raises very different questions and requires very different skills. Process is related to issues such as whether adequate consultation was undertaken and was sufficient regard given to different viewpoints. Substance on the other hand is at the heart of regulation and relates to issues such as whether costs have been assessed correctly and how the allowed rate of return is calculated.

In general, process is often best addressed through the courts, such as judicial review, although other solutions do exist. However, the mechanism for substance can be more problematic because of the technical skills required. Nevertheless, examples include:

- Specialist courts (US) – this is where a court has acquired the specialist skills required and has a track record of addressing such issues. In litigious countries with well running judicial systems, like the US, this approach has worked quite effectively but in some other countries where those prerequisites do not exist it can become a significant bottleneck to effective regulation;
- Specialist standing appeals bodies (UK) – some countries, like the UK, had existing specialist bodies well versed in economic and pricing issues. In the UK this was the Monopolies and Mergers Commission (MMC), now known as the Competition Commission (CC), and it has responsibility for hearing appeals against issues of substance in pricing and other regulatory decisions;
- Arbitration (often linked with contractual arrangements) – this is where an agreed process, often linked to international arrangements such as ICSID (International Centre for Settlement of Investment Disputes), are employed to address regulatory appeals. In the Manila water case the contract provides very clear rules about the process by which an arbitration panel for an appeal should be formed

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<sup>4</sup> A recent example of this is provided by the Irish energy regulator where a lack of clarity at the first determination created uncertainty about treatment of both over- and under-spends. For a discussion of this see CER (2007).

- and requires it to operate according to UNCITRAL (United Nations Commission on International Trade Law) procedures; and
- Expert panels – these are, in a sense, similar to the arbitration approach but may be less formal (possibly dependent just on the provisions of the contract). A panel of experts that may be ad hoc (formed for just this appeal) or standing (so available for any appeal). Chile has made significant use of such expert panels (see the box below) but they are also seen in Romania (described later in this paper), Ireland etc.

Of great importance to whether the checks and balances are seen to be credible and effective is whether the decisions of the above advisory bodies are binding or even implementable. In the UK decisions by the MMC on regulatory pricing issues tended to be advisory rather than binding although they were published so putting pressure on the regulator to justify any deviation from this decision. However, reforms starting in 2000 have changed this to make the decisions binding. Even if the decision is binding, can it be enforced? Some international arbitration is perceived as weak since it cannot directly enforce decisions, although again the transparency of the decision can place pressure on a country to respond. Other arbitration systems use links to broader organisations – ICSID is a part of the World Bank Group and so benefits from the position that organisation has. However, it is interesting to note that many international arbitration cases have been brought under bilateral investment treaties since these are felt to provide stronger protection for investors.

#### **Box 1: Expert panels in Chile**

In Chile, expert panels have been extensively used to solve regulatory disputes. These panels are composed of one or more regulatory or arbitration experts. They co-exist alongside other appeal bodies and their function to solve disagreements about regulatory issues amongst Government, the regulator and private companies is narrowly defined in law.

Originally expert panels in Chile were ad hoc, however, there has been a more recent move to make them standing with the first sector to do this the electricity sector

The expert panels have been used in the power, telecommunications, water and sanitation and public work sectors. They have made determinations in relation to tariff review, energy transfer payments and interpreting concession contracts. These panels have been used to a number of disputes, for example, 66 disputes were presented to the expert panel for public works alone (up to 2005). In general, the claims tend to have been presented to them by private companies instead of the Government.

*Source: Jadresic (2006)*

### **3. Increased effectiveness**

This section discusses the avenues through which effectiveness of the regulatory agencies in Africa (and elsewhere) can be increased.

#### **3.1 Better equipped staff**

The most obvious mechanism to make regulatory agencies more effective is to better equip staff to improve how well they perform their tasks. It seems that the issue is not about hiring ‘better’ staff. These staff members probably do not exist and, even if they do, they are unlikely to be a realistic hiring possibility for regulatory agencies since employment opportunities are so great elsewhere. Instead, the focus should be on how to make existing staff more effective.

An immediate candidate for improving the abilities of current staff is training. However formal education tends to be expensive. Other alternatives include:

- Local/regional training — gathering skills and information from the local environment can provide targeted and effective training. This can include establishing courses through local universities/centres, for example the University of Cape Town in South Africa or The Energy Research Institute in India;
- On the job training — many aspects of the job can be learnt through on-the-job learning, from work colleagues, consultants and own research. This can be viewed as time consuming, since many staff may be “captured” during the training but it is still likely to be more flexible than having staff out of the office for significant periods. Further, on-the-job training can be as simple as working alongside consultants during a project, knowledge transfer can still take place; and
- Secondments — learning can be accelerated by learning from people working in other organisations, either through their different or greater experiences, better processes or larger training budgets.

For the last of these it is possible to consider various options. For example, a network of regulators, such as that offered by AFUR, could allow secondments between agencies for periods of between three and six months. So, if a regulatory agency staff member in Zambia needs to learn about setting up a process for a price review and Uganda is preparing to commence a review, then seconding the Zambian staff member to Uganda would provide real practical training. Any secondment needs to be of sufficient length such that the secondee is able to participate and learn but it also has to be understood that “good” agencies or ones going through interesting problems should not be swamped by secondees – hence there is a role for a clearing agency, again something that AFUR could consider.

Information gathering and sharing can also be an important conduit for learning. Part of the process might include peer review. For example, the peer review carried out by members of the Energy Regulators Regional Association in Eastern Europe is intended to share experiences and practices and jointly explore how best practice can be achieved. The process consists of a review team comprised of one regulator’s staff and other

experts visiting another's regulator's site and reviewing their practices, which is then reciprocated (ERRA 2007).

In general, regulators face the problem of a high turnover of staff which can be exacerbated by training, as the consequent change in human capital improves employment opportunities elsewhere, which means that this method of improving the overall regulatory environment may come at a real cost. However, choosing not to train staff is not a viable alternative.

### **3.2 Outsourcing**

Outsourcing is the use of external resources to supplement internal ones. It can include support to internal resources as well as decision making, both of which can occur on- or off-site. The support to internal resources can encompass discrete pre-specified tasks as well as general support such as secondments – where a consultant is brought into an agency as though he is a staff member, so the terms of reference are flexible and work undertaken is as needed (this should not be viewed as anything but a short-term remedy to staffing problems, but it can be effective). In general, outsourcing decision making means replacing or complementing internal resources with external ones.

However, outsourcing raises its own considerations irrespective of the form, which may not make the process straight-forward. In particular, the regulatory agency will have to have the ability to design contracts, create procurement processes and manage consultants effectively. These are skills that are often over-looked by the regulator when determining their training needs. There can also be concerns about credibility if outsourcing is used too extensively, this is discussed further later in this section.

#### **3.2.1 Technical support**

This is the standard form of outsourcing support and tends to take the form of consultancy services. However, other resources may also be available. An example of this is in Jamaica where the airport regulator (CAAJ) was discussing the option of outsourcing some technical pricing issues to the general utility regulator (OUR) while also in Jamaica the Toll Road Authority outsourced some of its monitoring responsibilities to another Government agency (PPIAF forthcoming). This type of outsourcing tends to work well:

- If the relevant skills are rare or little used by the regulator;
- During start-up or transitional periods for the regulator; and
- When the costs of internal resources would be greater than the cost of external ones.

#### **3.2.2 Decisions**

In principle, actual decisions could be outsourced. Outside of the utility sector, it is often the case that independent third parties are used to settle disputes in contractual relationships.

**Box 2: Survey of how regulators use outsourcing**

In 2004, PPIAF funded a survey of 51 regulatory agencies to establish their contracting out processes for regulatory functions. They found that 75 per cent engaged external agencies to perform regulatory tasks and that more than a third of agencies spent in excess of 20 per cent of their annual budget to engage external experts. Further, 15 per cent contracted out binding input to regulatory decisions. However, the agencies reported a number of problems with outsourcing including difficulties associated with the ability to assess cost effectiveness, the small size of local consultancy markets and specifying and managing contracts.

Nevertheless, contracting was viewed as important by the regulatory agencies for:

1. Improving confidence of other stakeholders (92 per cent)
2. Building trust with stakeholders (71 per cent)
3. Ensuring independence (62 per cent)

*Source:* Bertolini (2004)

Outsourcing of decisions has been used in some regulatory environments, such as Romania (see box 3 below). However, the outsourcing of decisions tends to be an interim or transitional solution because of concerns relating to the loss of legitimacy (including higher risk of political interference) as well as concerns about legality. It may represent a more realistic option though when combined with regional initiatives, such as with the EcTEL example, which is responsible for overseeing the regulation of telecommunications in the Eastern Caribbean region (described later in this section).

**Box 3: How Bucharest Water outsources its regulatory decisions**

In the concession for Bucharest Water, there are three types of price adjustment:

1. Ordinary tariff adjustments (following the agreed formula)
2. Extraordinary tariff adjustments
3. Periodic tariff adjustments (every five years)

For the second and third types of price adjustment described above, an expert panel undertakes a review (without additional consultancy support) and sends their recommendations to the national regulator. The regulator has to accept them unless “substantial failures to follow the procedure and methodology” set out in the concession can be identified. However, this system was established prior to the national regulator being established and it questionable whether it would have been created in this form if the national regulator was already there?

The expert panel used to determine the relevant adjustment comprises a water sector engineer, regulatory economist and financial analyst. It is formed at the beginning of each five years with rules for how they will be selected if an agreement cannot be reached. The individuals cannot be Romanians or nationals from any of the investor countries. The names are agreed between the municipality and the concessionaire and if agreement cannot be reached then the International Centre of Expertise at the International Chamber of Commerce will act as the appointing authority.

Members are paid for the work they do and may receive a retainer. These conditions were based on standard dispute board terms and conditions.

*Source:* Shugart and Balance (2005)

### 3.3 Regional initiatives

Effective regulation tends to be expensive, which means that small countries or industries with low coverage may not be able to support the necessary resources. Regional initiatives can help to overcome the resource constraint in a variety of ways – in the same fashion that multi-sector regulation overcame cost problems associated with single sector regulation. Apart from the obvious sharing of costs, regional initiatives can:

- provide a common training platform;
- supply a forum for jointly developing rules and regulations;
- offer staff the opportunity to gain extra experience through secondments;
- take the form of dispute resolution services (which will be described further later); and
- at the extreme, be a common regulatory agency.

While establishing a full regional authority is probably beyond the remit of AFUR, there may be some aspects of these regional initiatives that could be commenced, including providing a clearing house for secondments and coordinating aspects of regulation by sharing information. AFUR's potential role is discussed further in the conclusions.

#### **Box 4: Example of a regional initiative — the Eastern Caribbean Telecommunications Authority**

The Eastern Caribbean Telecommunications Authority (EcTEL) provides an excellent example of how regional initiatives can operate in practice. EcTEL was established by the governments of five countries in the Eastern Caribbean area, including the Commonwealth of Dominica, Grenada, St. Kitts & Nevis, St. Lucia and St. Vincent and the Grenadines. Across the region, it is responsible for:

- 1) A coordinated approach to telecoms regulation
- 2) Management and regulation of the radio spectrum
- 3) Ensuring a competitive environment for telecoms in EcTel states
- 4) Promoting fair competition in telecoms services

It is supported by National Telecommunications Regulators in each country, who:

- 1) Monitor telecommunications companies
- 2) Inform EcTEL of their activities
- 3) Conduct hearings

EcTEL is comprised of a small permanent staff that review tariffs, carry out impact assessments and contract out training and legal opinion. In the contracting out process, a relatively high weight is placed on non-price characteristics of international consultants, at 70 per cent, instead of price characteristics, which have a 30 per cent weighting.

However, EcTEL has had a poor contracting out experience and intends to carry out more regulatory functions in house in the future. It appears that they have found it to be a high cost process with little control over the outcomes. Further, it has not led to an improvement in perceived competence, independence or credibility. The key problem seems to be that the analysis carried out is too 'theoretical' or fails to take into account the local environment and institutions.

*Source: EcTEL website (2007)*

## **4. Improved governance**

This section discusses how regulatory effectiveness could be increased through improved governance. These are areas that have been discussed at length in other presentations at the 2007 and previous AFUR meetings and so are only noted below.

### **4.1 Checks and Balances**

Governance could be improved through checks and balances, which would help to counter-act the perception that some regulators may be too independent. As discussed earlier in this paper, courts may not offer a realistic solution, especially to substantive questions, because of the technical skills required to effectively engage with them as well as the time required for their processes to be carried out. Alternative dispute resolutions systems can offer a solution, including arbitration and expert panels, which have been discussed previously.

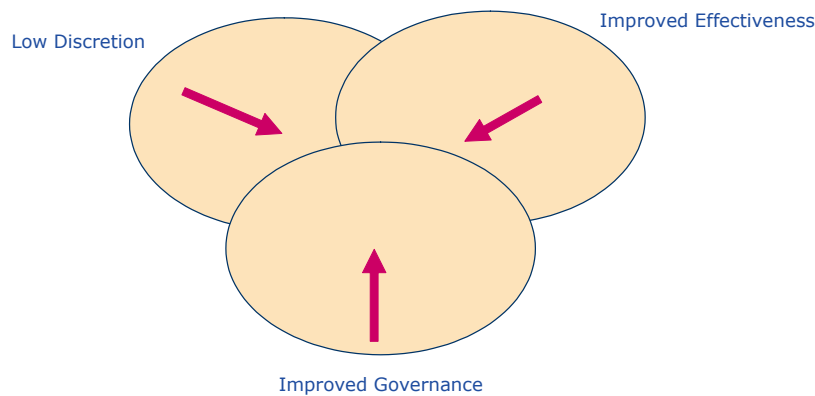
### **4.2 Regional options**

Regional options can help improve transparency and consistency through common processes and methodologies. They can act as a source of shared information for better benchmarking. Further, they can be a source of training or informed support, in terms of technical advisors or expert panels or arbitration. Regional options can provide a mechanism for national regulators to review each other's work. For example, the way that the Energy Regulators Regional Association in Eastern and Central Europe use peer review as part of their process for Regulatory Impact Assessments (ERRA 2007). As a final step, the regional body could act as the outsourced regulator for its members as per the EcTEL described in box 4 previously.

## 5. Summary and conclusions

It seems that any solution to improve the balance amongst regulatory independence, accountability, decision-making and performance is likely to involve elements of the different ways that have been discussed in this paper that can be used to reduce discretion, increase effectiveness and improve governance. However, the exact mix is likely to depend upon the form of the existing regulatory body as well as the legal and contractual environment that surrounds it. Some aspects will incorporate ‘best practice’ such as greater transparency and consistency as well as appropriate checks and balances. However others may be transitional, for example, low discretion rules and greater use of outsourcing.

**Figure 2: Combining the strands to strengthen regulatory commitment and credibility**



AFUR has a key role to play, which is enshrined in its core mission to ‘facilitate the development of effective utility regulation in support of African growth and development’. Within its framework, highly relevant objectives include:

- Adherence to transparent decision-making and due process requirements;
- Independent or autonomous regulation where possible (and desirable); and
- Accountability towards government, investors and end-users.

This is currently facilitated through its support of the capacity building efforts in the region as well as the workshops, meetings and discussion lists that it organises that encourages exchange of information and lessons of experience between African regulators. However, there may be further things that could be done. For example:

- supporting the development of secondments and other within-region training initiatives;
- supporting the development of panels of experts; and
- disseminating good examples of low discretion rules, consultation documents etc.

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## Annex 1: Examples of Low Discretion Rules

The following two examples are taken from Shugart and Alexander (2007). This project is being undertaken for the World Bank and is funded by PPIAF and the Bank-Netherlands Water Partnership Program.

### 1) Estimating the market risk premium

4.4.2 The market risk premium ("MRP") is determined as follows:

- (a) Calculate the mean of the estimates of MRP made by the following regulators: [specify names]. For each regulator, the final determination from the latest [water utility] price review should be used. If a regulator has quoted a range and not a single-point estimate, the mid-point of the range is to be used for that regulator. The value obtained is the MRP to be used.

*The names of the comparator regulators would be written in the rules. Only regulators that have undertaken at least one previous price review which has been perceived as being best practice, or close to it, with respect to the financial aspects of regulation should be included. Use a minimum of three names. Regulators that cover water utilities are to be preferred. Good candidates would be: OFWAT (England & Wales), ESC (Victoria), NER (South Africa), and SSIS (Chile).*

- (b) If a regulator specified in paragraph (a) ceases to exist, no longer determines the MRP, [or stops covering water utilities], then, if the Regulator and the Company cannot agree on a replacement for that regulator, the replacement must be determined by the expert procedure set out in [a section similar to Section [10.4]].

### 2) Determining the Regulatory Asset Base (RAB) and associated incentive for efficient investment

#### Section 6.3.4, Variant A: Rolling basis

- (d) The opening RAB for each year of control period 2 is determined by the following formula:

$$RAB_t = \hat{RAB}_{t-1} + \hat{Inv}_{t-1} - \hat{Depn}_{t-1} - (\hat{G}_{t-1} + \hat{C}_{t-1}) - \hat{A}_{t-1} - \max[(\hat{Inv}_{t-5} - Inv_{t-5}), 0],$$

where  $t = 2,1$  through 2,5.

*This allows the company to keep for five years the benefits of delivering the capex at a lower cost than forecast. To provide stronger incentives for the company to reduce investment costs, one could simply increase the difference between the year to which the opening RAB applies and the year relating to the capex. For example, one could add five more years – i.e. shift the correction by one full control period – so that  $t = 3,1$  through 3,5, and the subscript for both  $Inv$  values is  $t-10$ . This is analogous to the difference between Variant A and Variant B.*

## **Annex 2: Example of using rules to reduce regulator discretion: Chilean water**

Rules for price-setting are used by private water and waste water treatment companies in Chile that are highly prescribed and sacrifice reality for simplicity. A key example of this is the method used to establish the allowed rate of return. It is based on debt costs only and uses measurable proxy variables to determine the risk premium.

The formula for the allowed rate of return is:

$$r = r_f + r_p$$

where

$r$  = allowed rate of return

$r_f$  = average internal rate of return

$r_p$  = risk premium

The average internal rate of return is derived from treasury bonds. The risk premium is composed of two factors that capture the company's operational risk. One variable is the sum of equity, asset value and annual revenue while the other accounts for consumer demand's cyclical and predictability, using elements such as the percentage of residential customers. The net result is a risk premium between 3 and 3.5 per cent.

While this approach may create an allowed rate and return that is clear, measurable, transparent and easily understood by stakeholders, which should lead to less gaming, it creates the possibility of a divergence between the allowed rate of return and actual cost of finance. The divergence could be problematic in the event of unforeseen investment and uncertainty over business operations. Further, it does not remove opportunities for gaming completely.