Lessons from the *20th PURC/World Bank International Training Program on Utility Regulation and Strategy*

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Teachers learn from their students and students learn from each other. As in the past, the 80 participants in this training course identified the key lessons learned over the intensive two-week period. During the concluding session of the program, they shared their reactions to formal presentations and informal networking, PURC distributed questions from the Regulatory Body of Knowledge www.regulationbodyofknowledge.org on particular days: answers were posted the next day. Participants had the opportunity to check their understanding of key concepts. PURC also distributed a CD containing most of the material (PowerPoints and readings) from the binders. In addition, sessions on leadership and organizational design have been expanded in recognition of the role these issues play in complementing technical skills. Finally, PURC's staff appreciates the dedication and energy exhibited by participants in the 20th Training Program: they brought insight and understanding to the sessions, and shared their ideas with all of us.

Fourteen Lessons Learned about Improving the Health of Infrastructure Sectors

The lessons shared by attendees at the June 2006 course are listed in the order they were presented rather than according to the topical outline of the course. Despite competition from the World Cup, participants took the time to suggest some important themes that emerged during the two weeks. Mark Jamison noted that the lessons tend to be strategic rather than technical in nature—suggesting that many of the important ideas involved how regulators, representatives from government ministries, infrastructure managers, and consumer advocates needed to "get on the balcony." Intentionally stepping back from the "give and take" of regulation allows leaders to see how various stakeholders limit or promote reform. We hope that the annotated list stimulates further discussion among all those involved in these important sectors. At times, it seemed appropriate to illustrate lessons with parallels from the medical industry—where the health of patients depends on the skills and insight of physicians.

1. **The issues facing regulators in developing and developed nations are <u>similar</u>; sharing experience yields valuable lessons.** Regulatory and infrastructure issues are <u>universal</u>; they are not unique to individual countries or to sectors. Network industries present significant problems, given the substantial fixed costs and (often) rapid technological developments. Policy-makers may be concerned with different issues at different times, but all nations have to deal with sustaining good performance in the crucial sectors of telecommunications, energy, water/sewerage, and transportation. Sharing experiences benefits both the "giver" and the "receiver." Articulating the evolution of policies and outlining the strengths and

limitations of different incentive mechanisms forces the "giver" to review what went wrong and what went right with particular initiatives. Listening to the experiences of others broadens our awareness of the alternative strategies. In that sense, we were all patients, we were all healers.

2. **Managing media relations effectively presents challenges to regulators and to firms.** Both those developing and implementing policy and those managing infrastructure firms need to develop skills allowing them to communicate with the public. Technical jargon creates barriers—between physician and patient and between regulators and various stakeholders. If the public understands the policy priorities established in the political arena, then citizens are more likely to be in a good position to evaluate performance relative to those national objectives. Newspapers, radio, television, and the web offer numerous opportunities for promoting citizen participation in the process. Education is at the core of regulation.

3. **The lessons from other countries provide graphic examples of how reforms require time, commitment of political leaders, and the confidence of the public.** It may be useful to consider a medical metaphor, where regulators are viewed as physicians attempting to improve infrastructure performance. What are the acceptable ranges for key performance indicators? Is there a pattern that suggests a specific problem (or disease)? We know that it is easier to know what will severely harm network performance (kill a patient) than to know what will improve performance ("cure" the patient). In general, no medication regimen will automatically make a sector healthy (or a patient well) without behavioral changes: taking the prescribed medicine (responding to incentives), in following a diet (the rules established by the regulator), and/or engaging in periodic exercise (capacity-building within the firm).

4. **Infrastructure issues are dynamic and complex: problems are managed not solved.** There is no single recipe or solution to the problems facing decision-makers. Those responsible for developing and implementing policy need to adapt to dramatic changes in technology, citizen expectations, and political pressures. Professionals need more than technical training; they must also understand how overall organizational performance and regulatory oversight are affected by their interactions with stakeholders (including incumbents, entrants, customers, un-served families, ministries and industries).

5. **Those attempting to improve infrastructure performance are not alone—they have brothers and sisters around the world who are engaged in the same process.** One implication of networking is reciprocity: helping one another. One way to do this is to "write articles" to share ideas and to educate one another. For example, several sessions focused on benchmarking: a single index of corporate performance has the same problems as any indicator: it will be neither comprehensive nor fully diagnostic. In medicine, a physician can collect information on a patient's temperature, pulse, height and weight. Those four indicators help the physician determine whether the person has a dangerous fever and/or is overweight. The indicators point to potential or existing health problems. A fever is a short term problem that can be addressed with specific medications; weight is a longer-term health issue with implications for the heart attacks and other problems—diet and exercise programs might be prescribed. Without appropriate indicators that establish trends and baselines, establishing reasonable performance targets becomes nearly impossible.

6. **Price increases are not always bad; they can promote financial sustainability, improved service quality, and network expansion.** Those responsible for developing infrastructure policy sometimes focus too much on keeping price down, rather than on the associated financial incentives for improving sector performance. In addition, the "real" price of an infrastructure service is affected by service quality (reliability, meeting standards, and customer relationships). A "free" service that is available only two hours per day is <u>not</u> free! Of course, care must be taken to ensure that funds from price increases are not wasted. Thus, the governance systems of state-owned enterprises and privately-owned firms become important factors affecting sector performance over the long term.

7. **Although improving infrastructure performance involves applying fundamental regulatory principles, but in energy we find three "languages" (gas, electric, petroleum).** Each sector has generic network characteristics, but they differ in competitive conditions, cost trends, and opportunities for conservation. Thus, specialists must assist in the development of appropriate policies and instruments for improving the health of these sectors: promoting network expansion, system reliability, and cost-containment. Highly trained surgeons, dieticians, and other specialists play parallel roles in medical systems—although without communication within the team treating the patient, the situation is likely to become worse.

8. **The leadership role of regulator underscores the importance of drawing upon resources (web, people) and utilizing best practice (e.g. benchmarking).** Note that a single index of corporate performance has the same problems as any indicator: it will be neither comprehensive nor fully diagnostic. A physician can collect information on a many dimensions of human health. However, he or she must be able to step back from the detail to identify the patterns that can help in diagnosing problems. Similarly, the regulator needs to have the tools and information to make the right prescriptions to improve sector performance.

9. **National governments are generally drivers of infrastructure reform, with regulators playing a key role in implementing policy.** Sometimes a crisis triggers reform initiatives; alternatively, comparisons with nearby nations can lead to calls for new policies—starting with corporatization and (often) concluding with market liberalization and/or private participation. Failing organizations are complex. Like our bodies, an organization consists of many parts and the conditions involve mental as well as physical processes. The attempt to reform (or transform) a sick organization can be likened to that of curing a "sick" person, where the range of conditions can be extremely varied. In the context of the transformation process, regulators play an important role in establishing incentives and rules that promote efficiency, investment, and financial sustainability.

10. **Market reforms are like "surgical procedures;" they require preparation and expertise.** Healing a "sick" organization requires that both physician and patient agree that there is a problem and that the treatment is reasonable. In addition, an illness involves both physiology and psychology: the body and mind are interconnected in ways we may never fully understand. Similarly, measuring observable outcomes and analyzing accounting data on expenditures may tell regulators little about the qualitative aspects of an organization. At some point, precise "surgery" may be required—removing and replacing poorly performing components.

11. **Pricing policies affect cash flows and signal costs to consumers.** We know that tariff regimes involve both rate levels (for financial sustainability) and rate structures (driven by cost causation—such as peak/off-peak usage) and by concerns for social fairness (with targeted subsidies being the most cost-effective). The principles and pricing mechanisms for promoting efficiency and fairness warrant considerable attention from both managers and regulators. The health of the infrastructure firm is greatly influenced by the cash flows resulting from prices, service obligations, expansion targets, and quality requirements.

12. **Analysts need to understand the <u>specifics</u> (details) of sectors–for example, interconnection in telecommunications, changing fuel use patterns in energy, and benchmarking for water systems.** Infrastructure is complex and regulation involves balancing the interests of current political leaders, service providers, and customers. In addition, future leaders cannot be excluded from the policy development process, incumbents have different interests than potential entrants, and un-served citizens do not have the same concerns as those already receiving service. More comprehensive information can help identify potential conflicts, and (in some cases) provide opportunities for win-win policies. For example, in the context of a medical treatment, a set of blood tests will provide detailed information that can aid in diagnosing the physical problems that are only partly reflected in other health indicators. Similarly, diagnosing and treating mental health issues would require other diagnostics and treatments. Regulators (and physicians) need access to those with specialized skills.

13. **Expertise can help in the development of infrastructure policies, but reform champions must also recognize the roles of social legitimacy, investor credibility, and efficiency as important factors in the reform process.** Just as a physician needs information on a patient's vital signs, a regulator needs access to current financial and operating information to evaluate past performance and develop "treatments" (incentives) that are appropriate for the organization and consistent with the public policy objectives that regulatory policies are designed to promote. In a sense, a regulator is like a physician who is responsible for supporting a person in achieving good health. A "quarterly budget review" is like a physical check-up, where trends are evaluated and specific problems addressed. Of course, the physician/patient relationship tends to be one where neither is really "in total control". The patient must be able to recognize the symptoms of an emerging problem. The physician must have the skills to help address the performance issues.

14. **"Independence" is difficult both to define and to establish.** Insulation from day-to-day political pressures is essential if regulators are to be effective. At the same time, they must be accountable to the political process, as when commissioners are appointed, budgets reviewed, or regulatory impacts are assessed by stakeholders. Clearly, if political leaders do not want an effective regulatory system, they can ensure that one does not develop. One consequence of politically-driven rules and regulations is that private investors will view the bonds of infrastructure companies as very risky and equity ownership even riskier. The regulatory system can contribute to improved sector performance, but only if decisions balance long term considerations against the short term benefits of opportunistic behavior. Similarly, the physician should not receive kick-backs from prescribing particular pharmaceuticals—they must be free to offer what (in their judgment) is best for the patient.

Appendix: African Proverbs presented by PURC

In writing a paper with Silver Mugisha, "Turning Around Struggling State-Owned Enterprises in Developing Countries: The Case of NWSC-Uganda," I looked for some African Proverbs that contained useful lessons for decision-makers. I read a number of them at the start of the concluding session. A number of participants from the 20th delivery of the program requested that the list be included in the packet sent to PURC alumni. I believe that the proverbs contain deep wisdom and fresh perspectives on a number of topics relevant for infrastructure reform:

"A person, who never travels, believes his mother's cooking is the best in the world."
(Kiganda, Africa, Proverb)

"The hunter in pursuit of an elephant does not stop to throw stones at birds." *(Ugandan proverb)*

"Between imitation and envy, imitation is better."
(Ekonda proverb, Democratic Republic of Congo)

"A forest cannot be cut with a broken axe."*(Bantandu proverb)*

"If you do not listen to good advice, you will be embarrassed in public." *Oshiwambo (Namibia)*

"If you want someone more knowledgeable than yourself to identify a bird, you do not first remove the feathers."*(African Proverb)*

A family is like a forest, when you are outside it is dense, when you are inside you see that each tree has its place. *(Akan, Ghana)*

"Do not throw away the oars before the boat reaches the shore." *(Mpongue Proverb)*

The new moon cannot come until the other has gone."
(Bahunde or Hunde Proverb, Democratic Republic of Congo)

"If you refuse the elder's advice, you will walk the whole day."(*Ngoreme, Tanzania)*

"Water that has been begged for does not quench the thirst." *(Soga ,Uganda)*

"There are forty kinds of lunacy, but only one kind of common sense." *(African Proverb)*