Key Lessons from the 27th 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 89 participants (from 37 nations) 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. The PURC staff appreciates the dedication and energy exhibited by participants: they brought energy, insight, and understanding to the sessions and shared their ideas with all of us.

Note that while most of the lessons refer to regulatory agencies and to those developing infrastructure reforms, the principles apply to operators as well. Organizations face the same challenges: creating a sustainable infrastructure system where all stakeholders have confidence in the integrity of the process and have a shared vision of improved infrastructure performance.

PURC's Director, 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 of lessons stimulates further discussion among all those involved in these important sectors. I take full responsibility for errors of interpretation in this summary of key lessons. *Sandy*

1. **Define Problems Carefully:** Since infrastructure is so important for economic growth and social cohesion, public policy generally attempts to promote network expansion. The sector requires significant capital investments, so decision-makers need to prioritize their objectives and carefully define the problems they face. Companies, ministries, and regulators all shape the way issues are defined and addressed in the regulatory process.
2. **Avoid confrontation:** Operators and regulators can work together to improve sector performance. Public fights dissipate the resources of all the parties and diminishes citizen trust in the process. When citizens experience improvements in service quality and access to infrastructure services, they are more likely to support the institutions responsible for enhancing performance.
3. **No simple recipe:** "One size does *not* fit all." There is no single approach to regulation that works everywhere. The enabling legislation, the judicial system, national income, and investment climate all affect the opportunities facing operators. However, the same

regulatory principles apply in most circumstances. Regulatory systems[1] should promote credibility (with investors and government sources of financial support), legitimacy (so consumers feel protected from monopoly prices and from poor service), transparency (so participants know rationale for decisions), and efficiency in the delivery of service (so valuable resources are not wasted through mismanagement or political interference).

4. **Public understanding:** Regulatory systems need to be understood by citizens. So public education becomes one task for the agency. Technical jargon gets in the way of public understanding. While the press and media may highlight what is sensational, reporters and editors are aware of the crucial role of infrastructure in society's well-being.
5. **Multiple Skills are Needed:** Engineers, lawyers, economists, accountants, and managers bring expertise to infrastructure issues. Professionals with training in any specialty need to be able to participate in teams. That means that professionals in agencies and operators cannot work in silos. The organizational structures must encourage cross-training and respect for related fields. When dealing with complex infrastructure issues, we all could benefit from a little humility.
6. **Seek additional Resources:** Budgets are always tight. Capacity building represents an investment in people. However, those who attended the PURC/World Bank Training program realize that they are not alone. Networking and new friendships represent two sources of support. In addition, check out www.regulationbodyofknowledge.org .
7. **Across Nations, Laws may differ but Problems are Similar:** The legal structures supporting the creation and on-going operation of regulatory institutions differ widely around the world. However, the problems faced by agencies are similar everywhere: obtaining appropriate information, developing appropriate incentives for good performance, implementing rules, communicating to all stakeholders, and evaluating past decisions. "We learn from our mistakes; it is even better to learn from the mistakes of others."
8. **Identify Policy Options:** Identify potential solutions that work in the context of your own regulatory system. Too often, decision-makers are anchored in past approaches to prices, service quality, and network expansion. Analyze alternative decisions, and select the rule (or price or feasible target) that comes closest to meeting your multiple (weighted) objectives. Decisions must be grounded in reality: that means that they must be supported by an internally-consistent and feasible business plan. "The real voyage of discovery consists not in seeking new landscapes, but in having new eyes." (M. Proust)

[1] "The term regulatory system is meant to be broadly encompassing. It includes all relevant laws, decrees, and regulations; all regulatory agency activities; all appellate processes; and relationships between regulatory agencies and all other organs of the state on policy and administrative matters relating to the sector that is being regulated." Ashley C. Brown, Jon, Stern, and Bernard Tenenbaum, *Handbook for Evaluating Infrastructure Regulatory Systems*, World Bank, (2006). p. 11. The entire volume is available at www.regulationbodyofknowledge.org and the PURC Supplementary Readings CD.

9. **"Soft skills matter":** Technical skills are necessary but not sufficient for strong sector performance. Agencies and operators need professionals with leadership skills, skill experience in negotiation, and proficiency in communication. As was underscored by Robert Thomas: "soft" does not mean "easy" or "unimportant".
10. **Regulator as Facilitator:** The Regulator can serve a constructive role in creating a win-win environment. Stakeholders include government (both those in and out of power), firms (operators and their suppliers), citizens (un-served citizens, current customers, and future customers). Bringing all their concerns to the table requires that information-gathering be thorough. Sometimes, a consensus can be reached via an all-party settlements process.
11. **Some autonomy helps:** Total independence from the political is not feasible. Agencies are accountable to public officials for their use of resources. In addition, regulators are selected and operate under legal structures that can be changed. Nevertheless, some distance from day to day political pressures is essential if the agency is to be in a position to promote a climate promoting long term investment.
12. **Listening improves outcomes:** Dan Fessler said, "Be open to the viewpoints of all and subject to the dictates of none." A participant summarized this point as "Listen to all, be influenced by none." These ideas during the second week underscored the importance of stakeholder participation and transparency in the regulatory process. A participant noted that a decision that *no one* liked was likely to be balancing the interests of different groups—achieving a reasonable outcome.
13. **Plan Ahead:** Another participant stated that searching for potential unintended consequences was essential: "It's difficult to unscramble an egg." Strategic thinking attempts to anticipate potential developments under different scenarios (high vs. low growth, for example). If the decision is not robust to different trends, it is unlikely to be sustainable.
14. **Knowledge-sharing:** The sharing of knowledge represents an important activity within and between organizations. Formal training (like that at PURC) represents one setting for sharing ideas and experiences. Each organization needs a system that helps professionals be more intentional about seeking and sharing knowledge. There is no need to re-invent the wheel. Become a PURC Fan on Facebook.
15. **Financial Analysis for Operational Sustainability:** While Joel Houston may have been unable to make us MBA-level specialists in finance in one session, the importance of financial analysis was underscored in a number of sessions related to the time value of money, net present value, deciphering accounting statements, data collection, rate of return, price caps, and hybrid incentive schemes. For a tutorial on regulatory finance, see a PURC Working Paper by Eugene Brigham and T. Craig Tapley**.** "Public Utility Finance." Although it appeared in the *Handbook of Corporate Finance*, edited by Edward

I. Altman (New York: Wiley) in 1986, it identifies key issues and provides a nice overview of financial techniques.

16. **Growth possibilities are influenced by the regulatory climate:** If the operator can work with the regulator in creating an informed and supportive regulatory climate, the results can be win-win. Customers, operators, and policy-makers can see improvements in areas they value, whether that is network expansion, cash flow, or political acceptance. However, if the regulatory system is dominated by rhetoric (with minimal reference to reality), all stakeholders ultimately suffer.
17. **"Believing is Seeing":** As Ralph Waldo Emerson said, "People only see what they are prepared to see." Past experiences place blinders on us. Researchers call this confirmatory bias. We tend to discount or misinterpret facts that are inconsistent with our own world view. A wise person once said: "Don't believe everything you believe."
18. **Regulatory issues are not solely economic.** The resolution of infrastructure problems requires many disciplines, including law and engineering. Economics reminds us about the opportunity costs of making particular decisions, where these costs reflect the legal, financial, and technological constraints facing decision-makers. Of course, "soft skills" like creativity and communication represent other tools required by regulators and operators.
19. **Reform Requires Allies:** Karen Johnson noted that "Within the most dysfunctional system, someone is benefitting from the status quo." Thus, changing current institutional arrangements requires a number of groups to take on those benefitting from low levels of infrastructure performance—whether that is a political group benefitting from a patronage system, a group of workers who benefit from rigid work rules, managers with excessive discretion, or particular customers benefitting from prices below cost. Indentifying opponents and potential allies is the first step in the reform process.
20. **Staff Recruitment and Retention:** To recruit talented professionals requires salaries commensurate with the job requirements. Retaining outstanding staff requires that professionals feel valued and are actually rewarded for their job performance. An annual Award for Excellence represents one way to recognize outstanding contributions to the agency's mission. Becoming a regulator should not require a person to "take a vow of poverty."
21. **Seek background information:** Rate cases represent important (and highly visible) tasks for a regulatory commission. However, keeping tools sharpened is essential if the agency is to be ready to address infrastructure issues. The Frequently Asked Questions (FAQs) at www.regulationbodyofknowledge.org are designed to help regulators remain current with best practice around the globe.
22. **Complexity can be deadly:** One participant reminded us to "KISS (Keep it Simple Stupid!)." This message applies to communications to outside groups and to initial analyzes of alternative regulatory decisions. Once essential elements of outcomes are

identified, then analysts can try to fine tune the rules. If key issues are not appropriately identified and communicated, each party will try to gain public attention through unrealistic promises and the strategic presentation of information. Such activity creates a lot of noise in the system: "Weak regulation is like a swimming pool: all the splashing goes on in the shallow end."

23. **Preparation is crucial:** Given the social and economic importance of infrastructure in developed and developing countries, both regulators and operators need to be prepared for scheduled cases and for on-going monitoring activities. For example, prior to a rate case, engage in a multi-day role-playing exercise to ensure that you understand the issues that are likely to be raised during the process. While expertise is important, strategic thinking by leaders is also important. As Winston Churchill said, "Experts should be on tap, but not on top."
24. **External and Internal Communication is vital:** Issues need to be aired outside and within organizations. Communication is an essential part of transparency. Note the question is not, "Should there be regulation?" Rather, policy-makers should ask, "What are the limits to regulation as an institution for addressing infrastructure issues? What are the alternative arrangements?" There is solid empirical evidence that a good regulatory system improves sector performance. This point needs to be communicated to different external stakeholders.
25. **Policy Implementation requires Leadership:** Mark Jamison and Araceli Castaneda wrote a recent PURC Working Paper entitled *Reset for Regulation: Leadership for a Time of Constant Change*. The abstract reminds us to develop three perspectives: "The first is to focus on next practices, not best practices. Best practice is about following in someone else's footsteps, whereas next practice is about going into areas where no one has gone before. The second is focusing on why rather than focus on what. Asking "What should we do next?" emphasizes practice whereas asking "Why have certain practices been successful?" searches for underlying needs and context. The third juxtaposition is between leading and leadership. A leader provides direction, which is proper when the right direction is known. In contrast leadership mobilizes people to tackle difficult and often ambiguous problems and circumstances."
26. **Decisions are based on Incomplete Information:** Nobody can know "everything." Furthermore, attempting to obtain a perfect solution is the enemy of the good solution. Decisions by regulators and managers will be based on partial or incomplete information. The key is to avoid making decisions on incorrect or erroneous information. Being timely and adapting to changing conditions must be balanced against being consistent and predictable. No one said infrastructure regulation was easy!
27. **Transparency and Citizen Participation Promote Credibility with the Public:** Transparency provides information for stakeholders, including the general public. It is said that "The fewer the facts, the stronger the opinion." Thus, timely information allows both the regulator and operator to clearly establish the financial context. In addition,

giving all stakeholders a chance to participate in the regulatory process is another step in promoting credibility.

Finally, "Nobody can do everything.
Everybody can do something,
And together we can change the world."

Links to a few resources (from Sandy's Selections at the PURC website):

Africa's Infrastructure: A Time for Transformation This study is part of the Africa Infrastructure Country Diagnostic (AICD), a project designed to expand the world's knowledge of physical infrastructure in Africa.
services provider and who are committed to hiring an Operations Manager.

Consumer Participation in Infrastructure Regulation: Evidence from the East Asia and Pacific Region by Elisa Muzzini. This paper draws on results of a survey questionnaire conducted among 45 infrastructure regulators in the East Asia and Pacific (EAP) region. It finds that EAP regulators have successfully begun to involve consumers in the regulatory process.

Tariff Setting Guidelines: A Reduced Discretion Approach for Regulators of Water and Sanitation Services - By Chris Shugart and Ian Alexander. The objective of the project 'Tariff Setting Guidelines - A Reduced Discretion Approach' is to prepare a set of sound, well-specified guidelines that can be used by regulators to improve the predictability and transparency of the tariff-setting and adjustment process and thus reduce uncertainty.

The World Bank Infrastructure and Law Web site. This website is designed for government officials, lawyers and project managers who are involved in the planning, design and legal structuring of infrastructure projects, especially projects with private sector participation

Bogetic, Zelijko, and J. Fedderke. 2006. "International Benchmarking of Infrastructure Performance in the Southern African Customs Union Countries." World Bank Policy Research Working Paper 3987. This paper provides a first, systematic benchmarking of infrastructure performance in the SACU countries in four major sectors.

Benchmarking Data of the Electricity Distribution Sector in the Latin American and Caribbean Region, 1995-2005. This web site enables users to conduct cross-country and cross-utility comparisons.

Gratwick, Katharine Nawaal and Anton Eberhard. 2007. "An Analysis of Independent Power Projects in Africa: Understanding Development and Investment Outcomes." University of Cape Town, Graduate School of Business, MIR Working Paper. This document provides a valuable overview of IPPs.

Another helpful resource on the power sector is the report, Reforming Power Markets in Developing Countries: What Have We Learned? by John E. Besant-Jones. The paper is a sourcebook of some 240 references that study international experiences in power market reforms. The author was a featured presenter at the 24th PURC/World Bank International Training Program on Utility Regulation and Strategy.

The volume, Handbook for Evaluating Infrastructure Regulatory Systems (Brown, Stern, and Tenenbaum, World Bank, 2006), provides an overview of why, what, and how to evaluate regulatory systems. A CLASSIC!

International Benchmarking Network for Water and Sanitation Utilities, http://www.ib-net.org/ .

Check out other web-links at www.purc.ufl.edu