

**Key Lessons from the  
24<sup>th</sup> PURC/World Bank International Training Program on  
Utility Regulation and Strategy  
June 9-20, 2008**

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Teachers learn from their students, and students learn from each other. As in the past, the 99 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. 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.

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.

- 1. Teams allow an agency or organization to do *magic***—to produce ideas, policies, and strategies that are beyond the abilities of an individual. Of course, magic is not easy, since it requires the blending of many professional skills by thoughtful leaders.
- 2. Professionals at a regulatory commission must fully understand the mechanics of setting price levels, rate structures, and allowed returns.** The process requires setting and adhering to a schedule, inviting input from all stakeholders, evaluating that input, conducting independent financial analyses of business plans, determining whether current operations are efficient, and developing strategies for improving sector performance.
- 3. To fully understand issues, professionals need to have opportunities for continuous education.** Sharing experiences with colleagues around the world is one way to increase understanding of complex regulatory issues. Learning arises from all types of interactions. In the context of this training course, we learned from faculty and from each other. The lesson is that we need to tap into the skills of everyone in an organization.
- 4. Every nation faces challenges in the area of infrastructure performance.** No one is alone. Our problems may emerge from different situations and reflect different political tensions. However, the issues present significant challenges due to the high capital costs and the long durations for most infrastructure investments.

5. **Network industries present similar problems, in pricing, network expansion, and service quality.** While the problems facing each sector are similar, the strategies for addressing them depend on the particular national context, including maturity of political institutions and the degree of social consensus. Infrastructure is capital intensive and long-lived—so the financial issues are not easy to resolve.
6. **There is no simple recipe for regulation:** One size does not fit all. Appropriate strategies will depend on stage of development and national priorities. There are lessons from each nation, but no one has “the” answer.
7. **Reforms must be implemented with a human face:** objectives, targets, and decisions must be carefully explained to the public, recognizing that social rate making requires attention to who really benefits from subsidies.
8. **Regulators must think politically without being political.** The political environment shapes ministerial policy-making, legal developments, and court decisions. Regulators implementing policy need to communicate with all the actors, without being unduly influenced by any of them.
9. **Communication through the press requires skill:** preparing press releases, delivering information at press conferences, and answering questions from the media in general. Reliable information from the media is a prerequisite to setting targets, establishing incentives, and monitoring performance. Regulators earn credibility with government ministries (and investors) and legitimacy with citizens by demonstrating their competence and balance. As Daniel Carpenter writes in *The Forging of Bureaucratic Autonomy* (2001, Princeton University Press): “Bureaucratic autonomy.. . . emerges not from fiat but from legitimacy.” Public communication is central to this process.
10. **Regulators have a significant impact on sector performance,** though inadequate laws, political interference, and incumbent political power affect performance as well. See Brown, Ashley C., Jon Stern, Bernard Tenenbaum, and Defne Gencer. 2006. *Handbook for Evaluating the Effectiveness of Regulatory Systems*. Washington, D.C.:World Bank.
11. **Regulation is difficult everywhere:** no regulatory system is able to handle all contingencies perfectly. Institutions consist of laws *and* people: neither of which is perfect. Furthermore, the political economy of regulation is such that the concentrated groups are in a position to impose costs on large populations that are not well organized.
12. **Regulation need to be directed towards ensuring the sustainability of utility service.** Long-term success requires realistic targets, sound financial plans, and prices that are moving towards cost-recovery.
13. **Regulation is more an art than a science.** While technical skills and analytic capabilities are necessary for sound regulation, they are not sufficient. Many options are available for regulators: the art involves selecting (when possible) the approaches

that generate win-win outcomes. The science involves applying conceptual frameworks that have stood the test of time. These frameworks draw upon economics, finance, law, engineering, and many other fields.

- 14. Effective negotiation skills are essential for regulators** if the system is to promote improved infrastructure performance. Being able to understand the interests of all parties can make one more effective in developing win-win outcomes.
- 15. Political sustainability of regulatory rulings** is another factor affecting the long-term effectiveness of an agency. While regulators need to balance many objectives, they must recognize that the weight given to each objective is not equal. Those weights are likely to change over time, as performance improves with respect to some objectives or as political leaders emphasize particular goals.
- 16. Regulators tend to share the same problems.** Network industries pose similar issues across developing countries. They generally involve nodes, links, and distribution systems. Designing, building, and maintaining the systems requires a good understanding of demand forecasts and funding sources.
- 17. Avoid any perception of regulatory capture.** Certainly, regulators are likely to know key decision-makers in ministries or companies, but commissioners need to be particularly careful not to appear too close to affected stakeholders.
- 18. Events like the PURC/World Bank International Training Program on Utility Regulation and Strategy promote benchmarking among regulators.** International financial institutions, donor agencies, and researchers are developing techniques for evaluating regulatory performance—as reflected in processes and sector outcomes.
- 19. The new mathematics:  $2+2=5$**  technical skills = 4; but political skills = 5.
- 20. Coalition building is crucial for successful reform initiatives.** That means understanding the interests of all stakeholder groups and working to identify win-win options. Obtaining the support of reform champions can be crucial to social acceptance of new initiatives.
- 21. Benchmarking of utility service provides useful information.** Data allow regulators to compare past trends, evaluate current performance, and identify best practice (for targets). Executives only manage what they measure; regulators can only reward what is quantified.
- 22. Participants in the regulatory system need comprehensive knowledge regarding all “players.”** Decisions that ignore the core interests of important stakeholders are likely to be challenged and, ultimately, changed.
- 23. Because of information asymmetries within a nation, there is substantial value in sharing of information with other regulators in the region.** Benchmarking operating companies provides valuable information regarding managerial performance. Without data, the manager cannot manage; the regulator cannot regulate.

24. **Technical analyses can assist in designing interconnection prices** and in understanding the associated long-run incremental costs (LRIC) of particular services. Decisions that are data-driven are less likely to be challenged on the basis of insufficient information or inappropriate procedures.
25. **Transmission pricing raises complex problems related to cost causation, responsibility for investments, and incentives.** If the electricity system is unbundled, the functions of the transmission grid remain crucial to sector performance. The grid links generators to distribution systems and final demanders, so capacity expansion must be coordinated with developments in geographic locations.
26. **Operators promote economic development.** It is in the interest of private investors to roll out infrastructure facilities IF the returns are appropriate (given the risks). If the investment is undertaken by a state-owned enterprise, there are still hurdle rates that influence the design and timing of capacity investments.
27. **“Independence” is not an absolute:** the goal is to obtain some autonomy, so the agency is insulated from daily political pressures. Any organization is accountable to other entities, including the legislature, tax authorities, and its constituency.
28. **The unintended consequences of actions need to be identified as soon as they begin to appear.** For example, load shedding is one way to ration electricity; however, it opens up the distribution company to the theft of copper wires when the lines are not “dangerous.”
29. **Regulation, when effective, promotes better service and lower costs**—through the implementation of incentives that improve infrastructure sector performance.
30. **The ultimate objective of regulation is improving the welfare of all the people.** Citizens will not view the regulatory system as legitimate if regular improvements are not available. We all make mistakes: admit them, since ultimately the “bad news” will become widely known. Mistakes cannot be avoided. Whenever a regulatory or managerial decision turns out to have unanticipated negative consequences, admit it, learn from it, and move on. No one expects perfection. Most citizens appreciate candor.
31. **Innovations represent technological changes that alter investment opportunities.** For example, treated sewage can be utilized for irrigation or other uses. Access to broadband opens up possibilities for Voice over Internet Protocol (VoIP) services.
32. **The Gator Nation is everywhere: InstiGators, LegisGators, InvestiGators, EduGators, NegotiGators, PromulGators, CommuniGators, and ReguGators.** We now take our new skills and attitudes home for the benefit of those who supported us. The friendships established at this training program give support, inspiration, and hope. Networking with new friends and with colleagues can be a source of strength as we all tackle challenges in the days ahead.

**Four Observations on Regulatory Systems**  
**By: Elizabeth Butler and Sanford Berg (June 16, 2007)**

**1. The social and political culture is one important element of a nation's regulatory system.**

- Agencies can develop expertise in using “tools” and methodologies. Nevertheless, technical knowledge is necessary but not sufficient for developing sound regulatory decisions. Political commitment is also necessary, but not sufficient, for creating sustainable regulatory systems.
- In the 1990s, the World Bank and donor nations tended to encourage greater use of market-based incentives. The resulting commercialization of state-owned enterprises was supposed to promote private participation. The evidence is that the resulting utilities (and regulatory frameworks) promoted efficiency, but the price adjustment process often led to political problems.
- The regulatory/legal framework is heavily dependent on the support of civil society and associated political institutions. Public education and awareness are elements that can strengthen support for regulatory systems.

**2. Change requires time.** Vision statements are not self-implementing. Little of true significance is accomplished in very short periods. In addition, the sequence of reform steps can matter as well. For example, if assets are privatized before the decisions about market structure and regulatory policies are established, the valuation is likely to be based on undocumented understandings, political promises, and/or wishful thinking. If things have broken down, a national task force might be able to define the problem and identify feasible policy options.

**3. Interagency coordination is necessary in infrastructure:** Sector regulator, water resource management agency, environmental regulator and the public health authority for water. In the case of telecommunications, the sector regulator, the spectrum authority, and the competition agency should be in regular contact—so roles and responsibilities are clearly identified and policies are coordinated. Communication and collaboration are at the center of infrastructure issues.

**4. Managing social expectations is a challenge.** National policies towards decentralization or centralization affect data collection and policy consistency across regions. Developing an open, transparent decision-making process that is accountable to other government institutions promotes public awareness. Courts can be used for appeals. Legislative reports facilitate the monitoring of regulatory activities. Decisions can be data driven, recognizing that decisions are also values driven—reflecting the weights given different regulatory objectives.