

**Key Lessons from the
22nd 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 94 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's 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 41 lessons stimulates further discussion among all those involved in these important sectors.

1. **Managing the regulatory process** is important: comprehensive strategies and sound procedures can promote improvements in infrastructure performance.
2. **Viewing the big picture** keeps regulators and managers from getting lost in the details. Look to the “end-game” as the result of a sequence of decisions and reactions.
3. **Strengthening skills** and developing new capabilities enable professionals to prepare for and meet emerging issues.
4. **Reform is a continuous process**: do not “copy” what others have done, but learn from the successes and mistakes of others. Adapt and revise tactics utilized by others.
5. **There is no single recipe** for improving infrastructure performance: leaders in each nation must develop their own strategies, consistent with national priorities.
6. **Promoting change can be painful**. Human nature being what it is, many are unwilling or unable to take initiative and to become change agents. Identifying people who will push very hard for excellent performance is a key task of leaders.
7. **Regulation involves continuous learning**. It is a dynamic process, requiring regulators and stakeholders to monitor developments, measure performance, and motivate colleagues.
8. **Three skills for leaders** are the abilities to plan, manage, and communicate. These skills reinforce one another and, ultimately, determine whether organizations succeed or fail.

9. **Infrastructure professionals have counterparts** around the world. You are not alone. Issues faced by different countries and in different infrastructure sectors are not unique. Network industries have similar features, in terms of shared costs, political visibility, and social importance.
10. **Delays are not neutral** with respect to impacts. Those favoring the status quo (over reform) do not want leaders who are decisive (who set goals and implement programs ensuring that they are achieved).
11. **Infrastructure reform is interdisciplinary**, with engineering, economics, law, and finance at its core.
12. **Infrastructure is characterized by its complexity.** Yet, it is possible to identify key issues in each country and to devise strategies for strengthening sector performance.
13. **Generally, the regulator is a referee**, but sometimes it is necessary to become a player—always seeking “win-win” options. If there is no consumer advocate, the regulator becomes the voice of those without a voice. Note that future consumers are the most “silent” stakeholders so financial sustainability cannot be ignored.
14. **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.”
15. **Regulation is all about incentives.** Cost of service regulation, price caps, and hybrids all send signals to regulated firms. Therefore, it is imperative that the impacts of rules be fully anticipated.
16. The **availability of reliable information** is a prerequisite to setting targets, establishing incentives, and monitoring performance. Benchmarking can reduce (but not eliminate) information asymmetry.
17. **Technical skills are necessary but not sufficient** for performance-enhancing regulation. One should not under-estimate the importance of non-technical aspects of organizations, including ways to promote ethical behavior, strengthen people skills, and develop leadership. Technical jargon can hide as much as it clarifies.
18. **Acquiring adequate knowledge** and skills presents great challenges to poorly funded agencies. To achieve acceptance (and harmony) requires that all stakeholders understand the legitimate roles assigned to various groups. It is useful to separate policy-making, policy-implementation, and operations.
19. **Economic, technological, and legal principles** rest upon fundamental features of society and the operating environment. These universal elements still must be applied in specific cultural contexts.
20. **Benchmarking can enhance performance**; comparisons over time and across enterprises enable one to identify best practice. In addition, trends indicate whether progress is being made towards objectives. Yardstick comparisons can be incorporated into incentive systems.
21. **Regulators must be politically aware**, but they need to be insulated from day-to-day politics. “Independence” cannot be absolute, since any government agency is embedded in a legal system and must be accountable to the electorate.
22. **Learning never stops**, so organizations must have systems that promote personal and professional development.

23. **Concepts are “hooks” on which facts can be hung.** “Memory is like a coat closet. Education creates rows of hooks. Concepts are like coat hangers in a closet.” (Anonymous) Regulation must move beyond abstract concepts to the concrete realities behind those ideas. So leaders must be engaged in balancing, evaluating, communicating, and promoting collaboration.
24. **No one person possesses all the skills** (technical and non-technical) required for good decision-making. Input from teams can provide a wider range of options and perspectives.
25. **Customers represent a strong potential ally for regulators.** Citizen participation provides input into the process and educates opinion leaders about the feasibility of reaching policy objectives.
26. **Reformers must assess the specific situation** facing stakeholders in their own country. Contexts differ across sectors; for example, liberalization might be feasible in telecommunications, but infeasible for water and sewerage—given the technologies and income elasticities of those services.
27. **“Pure Independence” is a myth.** Regulators can increase their impact by enhancing transparency. Extracting information from state-owned enterprises may be one of the toughest tasks for a newly created regulatory commission.
28. **Licensing, inspections, information collection, and data analysis** are some of the potential activities of regulators.
29. **Good decisions** (that are sustainable over the long term and accepted by stakeholders) **require balance** among the interests of government ministries, operators, and customers. “The fewer the facts, the stronger the opinion.” (Anonymous)
30. **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.
31. **Changing technologies affect market structure** and the role and regulation. This point is best exemplified in telecommunications where Voice over Internet Protocol changes the roles of different service providers. Similarly, renewables, dispersed generation, and desalination affect the minimum efficient scale of production.
32. **Mistakes can be costly.** Thus, regulatory rulings must be based on the most complete information feasible and on a deep understanding of the links between incentives and subsequent behavior of infrastructure firms. What are the consequences of setting too high or too low an allowed rate of return? The costs of mistakes will differ depending on the need for external capital.
33. **The consultative process** is an important aspect of stakeholder “management.” Without citizen participation, decisions lack firm foundation in information. In addition, they lack legitimacy in the eyes of those affected by the rulings.
34. **Alternative energy sources** warrant the attention of energy regulators. With increased attention being given to carbon dioxide emissions, those committing funds to generating plants lasting 30 to 40 years need to explore all the options available for meeting projected electricity demands.
35. **We need to be good stewards of the environment.** One of our legacies (besides sound institutions) will be how we have altered the ecological features future generations will depend upon for their health and well-being. The political time

horizon may be until the next election, but our social and economic time horizons must be much longer.

36. **We need to promote professionalism** within regulatory agencies and operating companies. Excellence is not achieved by accepting the status quo. “You can’t build a reputation on what you are going to do.” (Henry Ford)
37. **Non-technical political issues cannot be ignored.** Regulatory leaders must anticipate issues that are likely to arise: being proactive requires peering over the horizon. In addition, political realities can be addressed through consultative processes.
38. **Those who we fear can become allies.** Of course, productive collaborative relationships do not arise automatically; they require investments of time and energy. Listening is extremely important. Speaking and acting with integrity are required.
39. **The effectiveness of the organization is constrained by laws and technical skills.** An organization’s culture reflects its values and accepted procedures. It is useful to focus on a few key issues rather than to dissipate one’s energy across a wide spectrum of concerns. Remember, people have problems: organizations often are so compartmentalized that problems are not addressed adequately.
40. **Regulatory commissions are hybrids,** involving legislative, executive, and judicial-like responsibilities. Implementing laws often requires that rules be developed that were unanticipated in the enabling legislation. In some nations, regulators both prosecute firms that break rules and judge whether offenses were committed. Such powers require that attention be given to procedures, ensuring accountability (and restraint in the use of authority).
41. **Friendship gives support, inspiration, and hope.** As one participant said, “We have new, lifelong friends after being together for two weeks.” Networking with new friends and with colleagues can be a source of strength as we all tackle challenges in the days ahead.

Additional Resources

Brown, Ashley C., Jon Stern, Bernard Tenenbaum, and Defne Gencer. 2006. *Handbook for Evaluating the Effectiveness of Regulatory Systems*. Washington, D.C.:World Bank.

The *Handbook for Evaluating the Effectiveness of Regulatory Systems*

- provides an overview of why, what, and how to evaluate regulatory systems;
- discusses the rationale for regulatory evaluations and describes various forms of regulation;
- compares the dominant styles of evaluation, emphasizing the importance of analyzing regulation systems against sector-based outcomes;
- presents the case for using the independent regulator as the benchmark for performing the most credible and effective evaluations;
- details elements of different hybrid or transitional regulatory systems when “best practice” regulatory systems are not feasible;
- describes how to assess the impact of regulation on sector outcomes and provides tools to identify these impacts;

- offers guidance on conducting quick, mid-level, and in-depth evaluations of regulatory systems.

Please follow this link to view the document online:

<http://rru.worldbank.org/Toolkits/InfrastructureRegulation/>

Additional Lessons

Here are some additional lessons from *The Practice and Politics of Regulation: Regulatory Governance in Indian Electricity*, by Navroz K. Dubash and D. Narasimha Rao, Macmillan India Ltd. 2007. The authors refer to their evaluation of the Indian experience, but the points should resonate with anyone who has attempted to improve infrastructure performance in the developing world.

1. New electricity regulators are constrained in acting as active stewards in electricity reform.
2. Uncertainty about selection processes for regulators and weak regulatory capacity hamper effectiveness and undermine legitimacy of regulators.
3. Ambiguity in the operating procedures and the lack of guiding norms around regulatory procedures leave scope for considerable variation in approach and exercise of individual discretion. Where there is a common approach, it is based on the prevailing mindset of public utilities.
4. Regulators exercise limited use of their powers due to an arms-length approach to scrutiny. While even this limited approach has led to non-trivial benefits, it has led them to avoid grappling with the most intractable problems in the sector.
5. Regulators side-step overtly political decisions by erring on the side of safety and defensibility, balancing pressures to accommodate while striving to maintain an apolitical façade.
6. Procedures for stakeholder involvement have introduced a welcome measure of transparency, but loopholes in procedures and their implementation remain, particularly with regard to information disclosure and regulators' responsiveness to stakeholder interventions. Stakeholder participation overall is weak, and the impact of stakeholder participation falls well short of a desirable "stakeholder model" of regulation.