



INFRASTRUCTURE  
Building for Growth



Government of India

# Approach to Regulation of Infrastructure





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# Contents

## Foreword

<b>Approach to Regulation of Infrastructure</b>	1
<b>A. The Regulatory State</b>	1
<b>B. Regulatory Framework for the Infrastructure Sectors</b>	2
<b>C. Constitutional and Legal Framework</b>	4
Separation of Power	4
Democratic Accountability	6
Federal Principle	7
<b>D. Uniform Regulatory Framework</b>	8
<b>E. Comparative Analysis</b>	9
United States	9
United Kingdom	10
Australia	11
Sri Lanka	12
<b>F. Issues and Options</b>	13
Objectives	14
Approach to Regulation	14
Institutional Framework	15
Independence and Autonomy	15
Functions of the Regulator	16
Accountability of the Regulator	17
Transparent and Participatory Regulatory Process	18
Regulation and Competition	18
Multi-Sectoral Regulators	20
Appellate Tribunals	20
Directions to Regulatory Commissions	21
Other Issues	21
<b>G. Way Forward</b>	21

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## Foreword

This paper analyses the current state of regulatory law and the associated institutional framework in India applicable to some of the key infrastructure sectors. There is an uneven approach to regulation across and at times even within different sectors of the economy because the system in each sector has been put in place as policies have evolved at different times. The paper sets out the objectives of regulating infrastructure sectors, and argues the case for establishing an overarching framework in order to eliminate divergent mandates currently prescribed for various sectoral regulators.

The need for such an initiative arises because infrastructure development in India is expected to follow a very different path in the years ahead compared to the past, with a much larger role for private investment in one form or other of public-private partnership. The Eleventh Five Year Plan has set an ambitious target of increasing total investment in infrastructure from around 5% of GDP in the base year of the Plan 2006-2007 to 9% by the terminal year 2011-2012. Around 30% of the required investment of around Rs. 2,056,150 crore (US \$ 514 billion) will have to come from private capital. The ability to mobilise private resources on this scale depends critically upon the creation of a supportive investor-friendly environment and the regulatory system is a critical component of that environment.

While providing an investor friendly environment is one objective of the regulatory system, it is equally important to ensure a level playing field for competing suppliers and also credibility in the ability of the system to safeguard the interests of consumers in terms of quality of service provided and its cost.

The paper reviews experience of other countries and suggests a broad approach to guide the next stage of regulatory development, keeping in mind the need for consistency across sectors. It is being published with a view to eliciting broader discussion and comments in this very important area.

September 13, 2008

(Montek Singh Ahluwalia)



# Approach to Regulation of Infrastructure

This paper analyses the current state of regulatory law and policy in India and proposes a broad policy approach to guide the next stage of regulatory reform. A careful analysis of the existing legal, policy and institutional framework in India reveals a somewhat haphazard and uneven approach to regulation across and within different sectors of the economy resulting in inadequate and expensive reform. This paper suggests a cogent philosophy of regulation that outlines the role and scope of regulatory institutions, and their relationship with the legislative and executive wings of government as well as the people at large.

## A. The Regulatory State

With the economic liberalisation initiated in the 1990s, the state has tentatively begun to vacate some of the commanding heights of the economy, where state responsibility for the provision of services was synonymous with state ownership. The new approach makes space for public private partnerships in provision of infrastructure and services combined with extensive state regulation for safeguarding user interests. The command and control mode of governance that relied on state ownership of infrastructure services is gradually moving towards a new mode of regulatory governance where public private partnerships and private sector participation require governmental priorities to be achieved through independent regulation and the law of contract. This transformation, however, remains an inadequately understood process.

Regulation may be broadly understood as an effort by the state to address social risk, market failure or equity concerns through rule-based direction of social and individual action. Economists regard economic regulation by the state as necessary only when a natural monopoly exists, or where a dominant player abuses monopoly power or to overcome some other form of market failure. Economic regulation is seen to be that part of regulation which seeks to achieve the effective functioning of competitive markets and, where such markets are absent, to mimic competitive market outcomes to the extent possible. Within economic regulation, the two core regulatory tasks are the setting of maximum tariffs and enforcing of minimum service standards. It also identifies and addresses subsidies and cross-subsidies in the pricing of infrastructure services. States generally use economic regulation in a broader context to achieve a range of non-market objectives which include ensuring universal and equitable access, consumer protection and maintaining safety and health standards.

The independent regulatory commission has emerged as the institutional framework by which these varied objectives are sought to be met. While policy making, framing legislation, rule making and the ownership of enterprises had earlier converged in the relevant department headed by the Minister, these functions are dispersed in the new regulatory environment. The independent regulator is positioned between the legislature, executive and judiciary on the one hand and the market on the other. Even this skeletal description

alerts us to the novel institutional framework in which regulation takes place and the attention it requires for ensuring that constitutionally and legally viable institutions are put in place.

## B. Regulatory Framework for the Infrastructure Sectors

The regulatory framework in the infrastructure

sectors has developed autonomously within each infrastructure sector with very little coordination or cross fertilisation of ideas across sectors. The table below captures the broad legislative and institutional framework currently prevailing in the key infrastructure sectors.

Sector	Relevant Statutes	Regulatory Authority
• Transport		No sectoral regulator
• Roads	<ul style="list-style-type: none"> <li>• National Highways Authority of India Act 1998</li> <li>• Central Road Fund Act 2000</li> <li>• The Control of National Highways (Land and Traffic) Act 2002</li> </ul>	No regulatory authority. NHAI acts as the regulator as well as the operator. States have floated their own corporations or agencies. Investors have no recourse to an independent regulator.
• Railways	<ul style="list-style-type: none"> <li>• Indian Railway Board Act 1905</li> <li>• Railways Act 1989</li> </ul>	Railways act as the operator as well as the regulator. Investors have no recourse to an independent regulator.
• Airports	<ul style="list-style-type: none"> <li>• Aircraft Act 1934</li> <li>• Airports Authority of India Act 1994</li> <li>• Air Corporation (Transfer of Undertaking and Repeal) Act 1994</li> </ul>	AAI is the operator as well as the regulator. Director General of Civil Aviation (DGCA) and the Bureau of Civil Aviation Security (BCAS) regulate safety and technical aspects only. Investors have no recourse to an independent regulator. Proposal to set up the Airports Economic Regulatory Authority.
• Ports	<ul style="list-style-type: none"> <li>• Indian Ports Act 1908</li> <li>• Major Port Trusts Act 1963</li> </ul>	Tariff Authority for Major Ports (TAMP) has the sole function of tariff setting. Investors and users have no recourse to an independent regulator on other matters such as dispute resolution, performance standards, consumer protection and competition.
• Energy		No energy sector regulator
• Power	<ul style="list-style-type: none"> <li>• Electricity Act 2003</li> </ul>	Regulatory commissions at Centre and States with very extensive functions and powers. Track record not as yet convincing.
• Oil and Gas	<ul style="list-style-type: none"> <li>• Petroleum and Natural Gas Regulatory Board Act 2006</li> <li>• Petroleum Act 1934</li> </ul>	The Petroleum and Natural Gas Regulatory Board set up in October 2007 regulates the refining, processing, storage, transportation, distribution and marketing of



Sector	Relevant Statutes	Regulatory Authority
	<ul style="list-style-type: none"> <li>Petroleum and Minerals Pipelines (Acquisition of Right of User in Land) Act 1962</li> <li>Oil Fields (Regulation and Development) Act 1948</li> </ul>	<p>petroleum products.</p> <p>Director General of Hydrocarbons licenses and regulates the exploration and optimal exploitation of hydrocarbons.</p>
<ul style="list-style-type: none"> <li>Coal</li> </ul>	<ul style="list-style-type: none"> <li>Coal Bearing Area (Acquisition and Development) Act 1957</li> <li>Mines and Minerals (Regulation and Development) Act 1957</li> <li>Coal Mines Nationalisation Act 1973</li> <li>Coal Mines Conservation and Development Act 1974</li> </ul>	<p>No regulatory authority. Control by Ministry (Coal Controller) and through nationalised corporations.</p>
<ul style="list-style-type: none"> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Communication Convergence Bill 2001</li> </ul>	<p>The draft Bill proposes a sectoral regulator to promote, facilitate and develop the carriage and content of communications (including broadcasting, telecommunications and multimedia). It is currently being reviewed in consultation with stakeholders.</p>
<ul style="list-style-type: none"> <li>Posts</li> </ul>	<ul style="list-style-type: none"> <li>Indian Post Office Act 1898</li> </ul>	<p>No regulatory authority. Proposal to create a new regulatory body. A draft amendment bill is open for consultation.</p>
<ul style="list-style-type: none"> <li>Broadcasting</li> </ul>	<ul style="list-style-type: none"> <li>Prasar Bharati (Broadcasting Corporation of India) Act 1990</li> <li>Sports Broadcasting Signals (Mandatory sharing with Prasar Bharti) Act 2007</li> </ul>	<p>Private participation allowed in the FM radio sector through licensing. No regulatory authority exists for radio and TV broadcasts. A Draft Broadcasting Services Regulation Bill, 2007 is open for consultation. It proposes setting up a Broadcasting Regulatory Authority of India</p>
<ul style="list-style-type: none"> <li>Cable TV</li> </ul>	<ul style="list-style-type: none"> <li>Cable Television Networks (Regulation) Act 1995</li> </ul>	<p>Provides for the regulation of carriage and content of cable TV broadcasts.</p> <p>TRAI has the responsibility of tariff setting and interconnection for cable operators.</p>
<ul style="list-style-type: none"> <li>Telecom and Internet</li> </ul>	<ul style="list-style-type: none"> <li>Indian Telegraph Act 1885</li> <li>Indian Wireless Telegraphy Act 1933</li> <li>Telecom Regulatory Authority of India Act 1997</li> <li>Information Technology Act 2000</li> </ul>	<p>TRAI has been given the responsibility to regulate telecom and internet service providers.</p>
<ul style="list-style-type: none"> <li>Water Supply and Sanitation</li> </ul>	<ul style="list-style-type: none"> <li>Indian Easement Act 1882</li> <li>Water (Prevention and Control of Pollution) Act 1974</li> </ul>	<p>No regulatory authority.</p> <p>Central Ground Water Authority is responsible for regulation and control of ground water development, with powers to control pollution and protect the environment.</p>



A survey of the provisions of the existing statutory and institutional framework suggests the absence of a common regulatory philosophy guiding the evolution of regulatory institutions in these infrastructure sectors. Political constraints and ministerial preferences over time seem to have dominated the reform agenda in different infrastructure sectors. It is time to recognise that institutionalising a robust regulatory philosophy based on a framework with adequate capacity is a necessary, though not sufficient, condition for accelerated and sustainable growth of infrastructure.

We need a better and more sophisticated understanding of the nuances of regulatory governance with a view to identifying the need for modifications in our present approach. Ideally, these considerations should have informed the sector-specific design of regulatory laws. However, owing to diversity in their approach and objectives, these laws have led to inadequacies that require urgent attention. This paper explores the next steps that regulatory reform must take, and considers whether an overarching regulatory philosophy will speed up regulatory reform and standardise some basic institutional features and regulatory processes across all regulatory institutions to serve the objective of enhancing competition, improving efficiencies and reducing costs. The next section investigates the constitutional and legal environment in which such reform must take place. It identifies the key principles that would help in setting up robust and

constitutionally valid independent regulatory institutions.

### **C. Constitutional and Legal Framework**

This section addresses the three general principles which are critical to regulatory institutional design in the context of the values enshrined in the Constitution.

#### *Separation of Power*

The 'separation of power' has been adopted as a fundamental principle whereby the constitutional powers and functions are divided among the three branches of government: legislature, executive and the judiciary. The judiciary and the state have rigorously applied this principle in three prominent areas: the appointment of judges, the creation of tribunals and the creation of regulatory institutions. It is the latter two areas that are relevant for the purposes of this paper.

The three way model of separation of power between the executive, legislature and judiciary breaks down wherever we seek to combine any two, or all three roles, in a single institution. The rationale offered for such combination of powers in a single institution is that decisions need to be taken expeditiously and with cumulative expertise. In the case of tribunals, executive expertise on specific subjects is combined with judicially managed adjudicative processes. Multi-member panels are formed to decide on

matters ranging from motor accident claims to debt recovery issues. The attempt to invest such bodies with wide ranging judicial powers, sometimes including the power of judicial review, bypassing the High Court was struck down by the courts as a violation of the doctrine of separation of power.

In the case of regulatory institutions, this problem is aggravated as a single institution makes rules of law, administers them, and finally adjudicates disputes which may arise. This multi-dimensional character of regulation raises complex problems of compliance with the principle of separation of power. The separation of judicial power from executive and delegated legislative power has been litigated repeatedly in the case of the securities markets regulator, the telecom regulator and most recently the competition commission.

The inability, or unwillingness, to embrace this fundamental constitutional principle has resulted in the troubled genesis of independent regulatory institutions in India. Superficially these disputes may be understood as yet another instance of a turf war between the executive and judicial branches of government. Such a description fails to appreciate the core principles that lie behind the separation of power. Inter-institutional bargaining is essential to secure liberty in a plural democracy where different interest groups have varied levels of access and control over the diverse institutional apparatus of the state. So if the liberty of citizens is at stake then the separation of power must be

ingrained in regulatory institution design. Moreover, this is a constitutional imperative.

The principle of separation of power is complied with when the rule-making and administration of rules are vested in the regulatory institution without combining judicial functions which are reserved for a differently constituted body. Such a regulatory institution would essentially perform the erstwhile role of the government in making rules and enforcing them through licensing and other mechanisms. The administration of these rules would require the regulator to function in a quasi-judicial manner in conformity with the principles of administrative law. This would be consistent with the principles of separation of power. However, the adjudicating tribunal, on the other hand, must be headed by a judicial member whose appointment and conditions of service are comparable to those holding similar positions in the judiciary. This adjudication tribunal must be insulated from the rest of the regulatory system and must adopt a process of the highest judicial standards to resolve the disputes before it. The institutional framework that has emerged in telecom and electricity sectors broadly conforms to the doctrine of separation of power with the regulators functioning as quasi-judicial bodies while appeals against their orders are heard by Appellate Tribunals that resemble judicial bodies in form and character. This principle has also been applied to the competition and securities regulatory regimes after a prolonged effort.

## *Democratic Accountability*

The principle of democratic accountability is the mode through which the constitution invests all public authority with legitimacy. While the legislature is directly elected by the people, the executive is made *politically* responsible to the legislature through the principle of collective responsibility of the Cabinet and the individual responsibility of the Minister. The executive is made *legally* responsible to the people by allowing the latter to challenge executive decisions in court using the facility of judicial review. Political and legal accountability of the regulatory institutions is examined below.

Inserting the independent regulatory agency into this institutional setting and simultaneously preserving its independence as well as ensuring its legitimacy is a difficult and demanding task. To maintain its independence from the executive, the regulatory agency is given functional autonomy in its day to day functioning while allowing the Ministry to issue only broad policy guidelines and directives. So it is unreasonable to empower the Ministry to directly require accountability from the regulator. If the regulator is not accountable to the ministry/executive then the two modes of holding the executive politically responsible to the legislature – namely individual responsibility of the Minister and collective responsibility of the Cabinet – break down.

To make the independent regulatory agency democratically accountable, three modes of

responsibility need to be established. First, the regulator needs to be directly responsible to the legislature. While the Ministry will continue to be responsible for the policy objectives it sets and the policy guidelines it addresses to the regulator, the regulator should be directly responsible to the legislature for the ways in which it chooses to administer the policy. This can be achieved by requiring the regulator to make periodic reports to the legislature (both on the previous year's activities as well as the regulatory approach and strategy proposed to be followed in the forthcoming year), be present before the designated legislative committees to explain their actions and even making them subject to legislative questions. Reports presented to the legislature by the regulator should contain the following:

- Rules and regulations notified by the regulator in pursuance of the relevant statutes.
- Summary of the final or provisional decisions and orders of the regulator along with the status of compliance thereof.
- Disclosure by the regulator of the methodology adopted for inviting public opinion on important matters including details on the notice and comment procedure.
- Recommendations to the Government, bringing out the need to amend or repeal laws or rules in order to remove or reduce regulatory burdens and anomalies, unnecessary paperwork and procedural formalities.

This will ensure that under no circumstances is the legislature unable to exercise oversight either over the minister or the regulator thereby ensuring complete accountability over important sectors of the economy. The legislative oversight in relation to the minister concerned should, however, exclude those areas where the regulator is directly accountable. Legislative oversight is also limited in one significant respect: those decisions of a regulator which are open to appeal before an appellate tribunal or court should be exempt from legislative scrutiny to avoid a clash of jurisdictions. However, it would remain open to the legislature to review the regulations or the policy underlying such decisions.

Secondly, the regulator needs to be made responsible to the people at large. This is possible by adopting processes and systems whereby interested citizens or groups of citizens may seek and acquire information, make representations and be accorded full process and participation rights. This capacity of citizens must be extended to both the rule making and quasi-judicial aspects of regulatory functions. The role of civil society organisations should also be recognised and enhanced. By requiring the regulator to rest decision making on publicly articulated rationale and persistently making them engage with the people at large is the most effective way for regulatory institutions to earn democratic legitimacy. Further, this is an effective safeguard against regulatory capture by special interest groups. However, it should be recognised that the requirement of

engaging with civil society organisations would by itself fail to achieve the desired results unless the regulators are themselves made accountable to the legislature.

Finally, the appointment of regulators who possess the competence and integrity so that they may inspire public confidence will contribute immensely to the status of the regulator. There is a need to develop appropriate conventions, preferably enshrined in statutory rules, requiring that regulators are appointed on a fair and transparent basis with a view to ensuring that the regulatory system remains insulated from interference and capture. Remuneration should be sufficiently attractive for qualified persons to be interested and restrictions on taking up commercial employment after regulator demits office should not be so stringent as to act as a barrier to their participation.

### ***Federal Principle***

The Constitution distributes legislative and executive power vertically between the Union, States and local government. As the subjects of economic regulation are often divided between Union and State competencies, the regulatory structure should reflect this distribution. An elementary glance at the different regulatory structures for telecom and power may suggest that the federal principle has been grasped and accommodated so far. However, problems remain in other areas and the dispute regarding the competence of the Gujarat State in enacting the Gujarat Gas (Regulation of Transmission, Supply and

Distribution) Act 2001 are indicators that the federal principle and the creation of multi-layered regulators deserves close attention. The latter dispute has been settled by Supreme Court in March 2004 by holding that the Centre has exclusive competence to regulate the transmission, supply and distribution of natural gas and LNG while the States may pass legislation only in respect of gas and gas-works for industrial, medical and other similar purposes. By anticipating and responding to the demands of federal principle in regulatory institution design we may be able to prevent such institutions from being derailed by expensive and prolonged constitutional litigation.

Wherever we create a multi-level regulatory framework, as in the electricity sector, we should ensure a common policy approach backed by uniform enforcement and dispute resolution processes through a range of formal and informal techniques. These could include bi-annual meetings with the central and state regulators where common policy objectives, and timelines for achieving them, are agreed upon. As domain knowledge and regulatory expertise is scarce, a centralised knowledge bank can be maintained in every sector so that all regulators are able to access sufficient information. These initiatives will help promote consistent and co-ordinated regulation of crucial sectors of the economy.

#### **D. Uniform Regulatory Framework**

The creation of independent regulatory agencies has in the last 15 years proceeded on

a sectoral basis, where each line Ministry or State Government, often prompted by a multilateral funding agency, has constituted a regulator for a particular sector of the economy. This sectoral approach has resulted in an uneven regulatory environment. Not only has there been considerable delay in setting up of these institutions, similar issues have emerged relating to the relationship of the regulator with the Ministry, the composition of the regulatory body, its functions and its accountability. This model of regulatory evolution is bound to be very expensive in terms of economic growth and welfare. The diverse approach adopted in different sectors is illustrated below.

The divergence among different sectors is significant in several respects as illustrated below:

- The electricity regulators enjoy extensive powers including rule making, licensing, enforcement, imposition of penalties etc. On the other end of the spectrum is the port sector where the regulator only sets tariffs and that too with restricted powers.
- The telecom regulator must promote competition as one of its functions whereas this is not a function specifically assigned to the electricity regulators.
- The tenure of regulators varies between 3 to 5 years in different sectors.
- Generally, members of regulatory commissions and appellate tribunals cannot be reappointed. However, in the case of electricity appellate tribunal, the

members can be reappointed for a further period of 3 years.

- The selection process varies from sector to sector. In the case of electricity sector, there is a selection committee specified by law while in some other cases, there is no such selection process.
- In some cases, the qualifications and experience are prescribed while in others this is left open-ended.
- Telecom and electricity sectors have appellate tribunals while other sectors do not have a specialised forum of appeal.

Equally debilitating, but less frequently appreciated are the sectors where economic reform has commenced in the absence of a regulatory framework. The highway projects and the recent airports modernisation / PPP programmes are illustrative examples. The concession framework applicable to national highway projects varies significantly among projects awarded so far. The absence of a regulator who can standardise concession agreements in the road sector has hampered the rapid and consistent development of the sector. In such cases there is an attempt to lead the transformation through incumbent government functionaries as lead agents which has led to flawed frameworks and the absence of consistent or efficient reform processes. Moreover, the sequencing of economic reform is a crucial ingredient in ensuring its success. If the state is hereafter going to rely on private entities and public private partnerships, then it should establish independent regulators in early stages of the reform process so that they can help promote fair play and competition in

the evolution of policy and regulatory frameworks. Since incumbent ministries also happen to be players, they should refrain from doubling up as umpires that would cause private investment to either shy away or seek a risk premium on this account.

In evolving the regulatory approach, it would be useful to distinguish within a sector between non-competitive segments that consist of the physical networks or carriage that have elements of a natural monopoly on the one hand and potentially competitive segments such as the content comprising electricity, gas or voice on the other hand. The next section investigates the extent to which a uniform regulatory framework has been developed in other jurisdictions.

## **E. Comparative Analysis**

This section briefly surveys the approach to the creation of a regulatory framework in four jurisdictions, namely the United States, United Kingdom, Australia and Sri Lanka.

### ***United States***

The US has pioneered the creation of Independent Regulatory Agencies whose core function is to create and improve the legal and institutional structures which support a market economy. These agencies are created by Acts of Congress and may be either specific in their remit, like the Federal Aviation Authority or a multi-sector regulator like the Federal Communication Commission. The enabling legislations have created regulatory



institutions in a piecemeal fashion over the last century and these are not uniform in scope and design. Regulatory agencies are regarded as a part of the executive branch, but they are not subject to everyday political interference, instead, they are closely supervised by the Congress which vets appointments, requires all rules to be presented before it and may subject agencies to careful scrutiny through the committee system.

Regulatory agencies are empowered to create and enforce rules which carry the force of law. Individuals, businesses, and private and public organizations can be fined, sanctioned, forced to close, and even jailed for violating federal regulations. To ensure greater transparency and democratic accountability to the rule making process, the Congress laid out the basic framework under which rule-making is conducted in the Administrative Procedure Act (APA), 1946. It remains the basic legislative standard on the process of rule-making which applies across all regulatory institutions. The requirements of the APA have been affected by more recent statutes the effects of which are beyond the scope of this paper.

Under the APA, the agencies must publish all proposed new regulations in the Federal Register at least 30 days before they take effect, and they must provide a way for interested parties comment, offer amendments, or object to the regulation. This is called a notice and comment procedure. Some regulations require only publication and an opportunity for comments to become effective. Others require publication and one or more

formal public hearings. The enabling legislation, which creates the regulatory agency, states which of these processes is to be used in creating the regulations. Regulations requiring hearings can take several months to become final.

### *United Kingdom*

The programme of economic reform involved the privatization of state utilities and the creation of independent regulators to take over the responsibilities of erstwhile Ministries. Through the 1980-90s this process was carried out on a case by case basis where regulators, non-departmental government bodies and quasi non-governmental organizations were created in each sector to carry out the state's role. By the mid-90s there were several such bodies which came into being with overlapping and clashing jurisdictions. Moreover there was lack of a common approach, consistency and quality of performance of these non-state bodies resulting in a situation where some bodies were performing worse than their previous avatar – the department!

An important feature of the regulatory institution in UK is that the regulators term and autonomy are not necessarily enshrined in law. For example, the electricity and gas regulator is appointed by the government and serves at the pleasure of the Queen without any statutory guarantee relating to its terms or conditions of service. However, the conventions in UK have ensured that the selection is credible while autonomy in



functioning is virtually taken for granted. Since the mid-1990s regulatory reform has topped the agenda in the UK. This has taken two directions. First, there has been the attempt to create a multi-sector regulator in some utilities industries with the Utilities Act 2000 which sought to bring the gas and electricity regulators under a single statute to streamline the regulatory framework and eliminate overlapping regulations. Similarly, the communications regulator (Ofcom) has jurisdiction over telecommunications, television, radio and wireless communications. Secondly, there has been an attempt to empower the ministers to remove or reduce burdens resulting from legislation. This has been done through the Legislative and Regulatory Reforms Act, 2006 ("LRRRA") which replaced the Regulatory Reform Act, 2001. The LRRRA permits a minister to pass any orders specifically and only for the purposes of "reducing any burden or the overall burden resulting directly or indirectly for any person from any legislation" where burden is defined to include (a) a financial cost, (b) an administrative inconvenience, (c) an obstacle to efficiency, productivity and profitability, or (d) a sanction criminal or otherwise, which affects the carrying on of any lawful activity. Before making an order, LRRRA requires the relevant minister to be satisfied that the proposed order is "transparent, accountable, proportionate and consistent", and that legislative change is required to secure the policy objective, that the proposed order "strikes a fair balance" between the public interest and the interests of any persons adversely affected, does not

remove any "necessary protection", and does not prevent anyone from exercising rights or freedoms that they "might reasonably expect to continue to exercise".

The Utilities Act 2000 regulates three utilities industries by specifying precise sectoral goals to be achieved by each regulator. While this UK statute allows the several existing regulators to continue to exist, it brings their regulatory functions and objectives under a single statute. Further, the statute streamlines the appointment and dismissal of regulators, their accountability to Parliament and the regulatory processes they adopt.

In some ways, the legal framework for regulation of the utilities sector in the UK at the turn of the century was akin to the present Indian situation where existing regulators were governed by sector specific statutes with diverse regulatory objectives as well as different regulatory structures and processes. Much like the UK we will need a period of consolidation whereby regulation across utility sectors is standardised through a consolidating legislation which applies to all existing regulators.

### *Australia*

The regulation of public utility industries in Australia is divided between the Commonwealth and the States in an intricate manner. The Commonwealth or Central government has control over competition policy, ensuring access to essential infrastructure and regulating access to national

networks in all sectors, as well as telecom, airports and national road projects. The States may regulate water, intra-state transport, ports and electricity and gas generation, distribution and retail supply. The often complex distribution of regulatory competence between the federal government and the provincial governments resembles the Indian regulatory context.

The legal framework which establishes this regulatory framework is diverse. There is no standardization in regulatory institutional formats, objectives or regulatory process at either State or Central level. Each regulator is established under its own legislation which sets out the objectives of regulation, the institutional framework and the processes to be followed while achieving these objectives. Most states have adopted a multi-sector regulatory model so that a single regulator covers electricity, gas, water, urban transport as well as ports and other sectors. The regulators are invariably commissions whose members are drawn from the fields of economics, business, legal and finance, and consumer protection. They are usually appointed for fixed terms by the Premier of the State.

The most important learning from the Australian experience is with respect to Centre State co-ordination to develop a common regulatory approach in some sectors. For example, the national markets in electricity and gas through inter-connected networks were developed using common national market rules agreed upon after extensive

consultation between the provincial and federal governments, utility industries, consumers and other stakeholders.

### *Sri Lanka*

The Independent Regulatory Agency is a relatively new feature in Sri Lanka. In the last two decades, several regulators were created by enabling statutes to regulate specific sectors of the economy. More recently there has been an effort to set up multi-sector regulatory institutions which combine the jurisdiction and scope of the previously sectoral regulators in a single institution. The rationales articulated for the multi-sector regulatory approach are eclectic and diverse. Some suggest that the degree of commonality in the object of regulation allows for an integrated approach. Moreover the tools and form of regulation used in these sectors are often similar. For example, tariff regulation and universal service are concerns of all these sectors. Further, if the regulatory processes and regulatory knowledge are shared across sectors then the costs of running a single multi-sector regulator may be lower than that of running several multi-sector regulators. Finally, it is suggested that a multi-sector body will be less vulnerable to political and regulatory capture as several ministries and industries will be vying for very different regulatory outcomes across several sectors of the economy.

The Public Utilities Commission of Sri Lanka Act, 2002 was the result of this reform initiative. This statute establishes the Public

Utilities Commission of Sri Lanka to regulate certain utilities industries pursuant to a coherent national policy. The statute provides for the regulation of public utilities industries set out in a Schedule to the Act which may be amended by a Parliamentary resolution adding or deleting any utilities industry. Presently the schedule includes just two industries: electricity and water services but potentially several other sectors may be brought under the single utilities regulator.

The Sri Lankan approach sets out a common regulatory approach by specifying the objectives of regulation of utilities industries to be: the protection of consumer interests, promoting competition, promoting efficiency in the operations of and capital investment in public utilities industries, benchmarking utilities services against international standards, promoting safety and quality in service and ensuring that price controlled entities are able to raise adequate financial resources.

The relationship between the concerned Minister and the Commission is clearly spelt out as the Minister may only issue general policy guidelines in writing which set out national priorities in the sustainable development of the sector and any measures which may be necessary to service under-developed areas of the country or disadvantaged sections of consumers. The independence of the regulator in day to day affairs is ensured by allowing for no other instructions to be issued by the Minister. Though Ministers are empowered to appoint

regulators they must do so with the concurrence of a bipartisan Constitutional Commission. Ministers cannot dismiss the regulator. However, under exceptional circumstances the Minister may petition the Parliament to have a regulator removed, and this resolution must be passed by a majority of members in Parliament.

The Commission is made accountable to Parliament by requiring it to submit annual reports which outline a general survey of developments including how it has achieved its specific mandates. This report should present the enforcement actions carried out by the Commission and outline the extent to which the particular sectors of the economy have achieved the targets set for them.

The approaches to regulatory institutional design in the jurisdictions surveyed above illustrate the distinct policy choices available in designing the regulatory framework in India. Each of the above jurisdictions provides lessons to draw from while evolving the way forward in India.

## **F. Issues and Options**

The next steps of regulatory reform should aim at developing a regulatory philosophy and legislation that should reflect the lessons learnt and incorporate best practices. The focus areas should be institutional framework for regulatory commissions, their role and functions, their relationships with the executive and legislature, and their interface with the markets and the people. The

processes and methods of regulation, including rule-making and dispute resolution, should also be standardised and streamlined. The key issues to be addressed are briefly considered below:

### ***Objectives***

The proposed approach should establish an overarching regulatory framework for the orderly development of infrastructure services, enable competition and protect consumer interests in securing access to affordable and quality infrastructure. By clearly setting out the objectives of regulating the infrastructure sectors, it should be possible to eliminate divergent mandates currently set out for sectoral regulators.

### ***Approach to Regulation***

It should be recognised that competition is the best safeguard for consumer interests. Regulation should aim at removing barriers to competition and eliminating abuse of market power. In those segments of infrastructure services that are amenable to competition, regulation should be light handed and tariff-setting could be left to competitive markets whereas segments that have elements of monopoly should be subjected to close regulation. In all cases, performance standards should be regulated for ensuring the quality of service. Regulation should also extend to determination of tariffs for supply of goods and services like railways and coal so long as the market structure remains monopolistic.

Each of the infrastructure sectors can be broadly divided into carriage and content segments. Content normally refers to electricity, gas, data or voice. Carriage refers to transmission lines, networks, exchanges, airports, ports, highways and other fixed assets. While carriage is typically regarded as a natural monopoly, the content is eminently amenable to competition. In order to enable competition in the content segment, carriage should be subjected to non-discriminatory open access under close regulatory oversight including determination of tariffs. Where technology or market structure enables adequate competition in carriage, its regulation could remain light handed. These aspects would have to be clearly addressed in the overarching approach to regulation.

Several infrastructure services and projects are governed by concession agreements or contracts signed between the government/public authorities and private entities. These agreements also address tariff determination and performance standards that are typically subject matters of independent regulation. A well defined contract can lend greater predictability and enforceability for provision of infrastructure services whereas a flawed contract may lead to the contrary. Prior consultations with the regulator and stakeholders can help create an appropriate contractual framework and eliminate unintended outcomes. A regulatory process for evolution and finalisation of standardised concessions/contracts should form part of the overarching approach to regulation.

### ***Institutional Framework***

To be effective, all regulatory institutions should normally be empowered to make regulations, issue licenses, set performance standards and determine tariffs. They should also have the powers to enforce their regulations, licence conditions and orders by imposing punitive measures including suspension or cancellation of licences. They may also adjudicate on disputes among licensees and between the licensees and the government, subject to review in appeal before an Appellate Tribunal that is headed by a judicial person. In discharge of their functions, the regulatory commissions should be governed by the principles of administrative law and should be expected to act as quasi-judicial entities.

Given the growing importance of regulation in several critical sectors of the economy, the governance relating to regulatory institutions has assumed an important role. It is, therefore, necessary to specify an agreed philosophy and overarching principles that would govern regulatory commissions across sectors. Consistent with an overarching regulatory framework for the orderly development of infrastructure services, the regulators could continue to function under sector-specific statutes that are administered by the respective Ministries.

### ***Independence and Autonomy***

For achieving the desired objectives, it is necessary to ensure that the regulatory

institutions remain independent and autonomous. The selection, appointment and removal of chairperson and members should be insulated against any perceived interference or manipulation that may influence the outcome.

Selection should not only be fair, it should also appear to be fair. The chairpersons and members of regulatory commissions could be appointed by the President of India on recommendation of the Prime Minister who should choose from out of a panel of two or three names empanelled by a High Powered Selection Committee and approved by the Minister concerned. Similar arrangements can be replicated at the State level. In the selection and appointments relating to Appellate Tribunals, the same process could be followed except in case of judicial members who should be appointed on the recommendation of the respective Chief Justice.

At present, tenures of the members of regulatory commissions and appellate tribunals vary between three and five years. An option could be to provide for a fixed tenure of four years in all cases. The qualifications and experience of members should also be specified by law with a view to ensuring a multi-disciplinary composition of the regulatory commissions and appellate tribunals. The terms of service should be sufficiently remunerative to attract qualified and experienced persons. Further, at least one of the members could be drawn from other than public sector background (such as academics, lawyers, chartered accountants,

managers etc.). This would enrich the functioning of the respective regulatory bodies.

Removal of members may be initiated by the Government, following an enquiry on grounds such as insolvency, physical or mental incapacity, failure to meet conditions of appointment, conviction for an offence, misbehaviour and/or failure to discharge duties. The removal of a chairperson or member shall be preceded by approval of the President on the recommendation of the Prime Minister. Members once appointed should not be eligible for reappointment by the government and must also be debarred for a period of two years from acquiring, holding or maintaining, directly or indirectly, any office, employment or consultancy arrangement or business with any entity or its associate dealing in matters under the jurisdiction of the concerned regulatory commission.

The budget for the regulator should be presented by the Ministry concerned for seeking Parliamentary approval for grants from the Consolidated Fund and / or from levy of such fees as may be authorised. The budget should be examined by a Parliamentary Committee before it is put to vote for approval. Once approved, the entire budgetary allocation should be placed at the disposal of the regulator by the Ministry concerned and no 'utilisation certificates' should be sought from the regulator as a condition of release of budget.

The regulator should have a fair degree of

independence in determining the staff necessary to efficiently carry out its operations and in determining the compensation payable to the staff. In particular, the regulator should have the freedom to appoint expert staff on contract for upto three years on market-determined compensation. The expenditure on staff should, however, be subject to approval of the regulator's budget by Parliament.

The key test of the independence and autonomy of regulator relates to its everyday functioning relationship with the concerned Ministry. Wherever the Ministry chooses to issue policy guidelines to the regulator they must be general in character and not relate to specific regulatory decisions. Such policy guidelines should also be preceded by consultations with the regulator. Further, these policy directives should be submitted to the Cabinet for approval and should be made available to all concerned stakeholders and the public at large.

### ***Functions of the Regulator***

A consistent and coherent regulatory framework can only be developed by allowing regulators sufficient scope to develop their sectors for achieving clearly defined objectives. These should include promoting competition among the market players and thereby promoting efficiency in both the operations of, and capital employed in, infrastructure services. Regulation must achieve rapid growth in the infrastructure sectors while ensuring equity of access and a geographical dispersion of services.



Infrastructure services must be benchmarked to international standards of performance as well as safety and quality. Where tariffs are regulated, the regulator must ensure that the industry remains viable to be financed on commercial terms. Finally, all regulators must carry out their mandate to protect consumer rights and interests by ensuring quality of service and lowering costs. They must engage in diverse consumer education and develop Consumer Advisory Committees which may formally represent consumer interests in the regulatory framework. Individual consumer disputes should, however, be left to the consumer fora and the judicial system. A policy for providing support for consumer advocacy may be evolved by the Department of Consumer Affairs to build capacity of consumers/civil society organisations so that they can raise consumer concerns more effectively and help facilitate review of regulators' performance by stakeholder groups.

There are several goods and services in infrastructure sectors where the market does not set the price. These include rail services, oil and gas and coal supply. An independent tariff regulator should substitute the government insofar as tariff setting of these goods and services is concerned. This would help depoliticise the process of tariff setting and also bring transparency in the costing of these services, particularly the efficiency thereof.

### *Accountability of the Regulator*

Though regulators must be autonomous and independent of the Ministry, they must simultaneously be made accountable through various other institutions and processes. Ensuring transparency in regulatory rule making is a crucial ingredient in ensuring accountability. The power to make regulations must be subject to the compulsory requirements of prior publication with sufficient time for notice and comment. Regulators must be compelled to respond to the comments received before any regulation is made. Once a regulation is made, it should be tabled before Parliament and subjected to scrutiny by the appropriate legislative sub-committee. Ensuring this rigorous process of scrutiny of rule making will help improve both the quality of rules made and the democratic legitimacy of such rules.

The overall functioning of the regulator should be subjected to scrutiny by the Parliament. This can be done by requiring the regulator to submit an annual Report to Parliament setting out the regulatory approach that it proposes to adopt in the forthcoming year and the outcomes it hopes to achieve in the context of the legislation and the policy directives set by the Ministry. At the close of the year, the regulator should present a report to the Parliament assessing its success in achieving the objectives set out in its annual plan. These reports should be finalised after a transparent process of consultations with stakeholders, and upon submission to the Parliament, through the Ministry concerned, these must be



scrutinised by the appropriate legislative sub-committee and the regulator must be present to answer questions. Like the Ministries in government, the regulator must be required to provide written answers to Parliamentary questions regarding its activities, either directly or through the Minister for the concerned Ministry.

The capacity of legislatures to scrutinise the functioning of regulators would be enhanced by the information and analysis presented in an audit report. The annual expenditure of the regulator must be audited by the C&AG and its report should be laid before Parliament. However, unlike the Audit Reports of Ministries and Departments, the audit of regulatory bodies should be limited to expenditure control and not policy review of regulatory decisions.

In addition to the political accountability through legislatures, the regulators must be made legally accountable in several ways. First, any person or entity aggrieved by a decision or any consumer association with an interest in the decision may file an appeal before the Appellate Authority within 30 days of the decision. Appellate Orders should be final in all respects and appeals to the Supreme Court should be confined to questions of law. The statute may set out that the appellate courts must settle the interpretive question of law and remit the case back to the regulator for final orders. Secondly, judicial review of the decision making process adopted by the regulatory commission or the Appellate authority must remain. Such judicial review

should only extend to questions of law and to the procedures of decision making; it should refrain from going into the policy choices made by the regulatory institutions. This will encourage the courts not to interfere with the complex and polycentric decision making by regulators which judicial fora are generally not equipped to handle.

### ***Transparent and Participatory Regulatory Process***

Independent regulatory institutions should embrace a transparent and participatory process which allows all stakeholders, including consumer groups and citizens to interact with these institutions in a predictable and consistent fashion. The regulator must adopt a regulatory process that ensures avenues for participation by stakeholders. Its proposed annual plan of action and consultation papers should be freely available on the website. The two central functions of the regulator are rule making and the enforcement of rules. These functions should be standardised across regulators to ensure that opportunities for interventions are made available at every stage of the regulatory process.

### ***Regulation and Competition***

One important aspect that needs to be tackled is the identification of specific roles of the regulatory authority and the competition commission. Presently, the competition and regulation laws ignore the potential jurisdictional overlaps between the two areas

of law. Sections 3, 4, 5 and 6 of the Competition Act 2002 which are the key substantive provisions of law are not market specific and apply generically to regulated and unregulated markets. So it is inevitable that sectoral regulators and the competition commission will issue directives to the same market players which are likely to conflict given the diverse perceptions of the respective authorities. Needless to say, it is likely that the sectoral regulator and competition commission are capable of coming up with different prescriptions to achieve the common goal of a competitive service unless these two systems are integrated in a more comprehensive fashion.

There is a minimal institutional interface between the regulators and competition commission. Though Section 21 allows any statutory body, which includes a regulator, to refer matters that may potentially violate the competition law, this is optional and regulators may choose not to do so. Further, by creating an interface which is limited to dispute resolution, the statute leaves open a wide scope for disagreement which may best be resolved before they have matured into legal disputes. Several options may be explored to reconcile the role of the regulator and the competition commission which are premised on different assumptions about their relative competence and primacy. Let us first look at the options developed in other jurisdictions before considering the proposals set out by the Competition Commission of India.

The Sri Lankan approach is to grant the Utilities Regulator the responsibility for competition law enforcement in the utilities sector. The US approach is to allow the competition commission a full reign over anti-competitive behaviour in any sector of the economy and this seems to be the institutional choice adopted in India. A third approach may be to divide up sectors of the economy into competitive and non-competitive segments so that the former are controlled by the competition commission and the latter are assigned to regulators. The UK achieves this objectives not through statutory law but by allowing regulators and the competition authorities to develop inter-institutional agreements for each section which are publicly agreed upon so that the market players are aware of the institutional arrangements and a consistent policy is developed.

The Competition Commission of India has conducted its own analysis of the interface between regulation and competition in India and explored three possible modes of interaction. First, mandatory consultation between regulators and competition commission before any action is taken in regulated industries may be a formal and effective technique. This may be institutionalised by allowing some members of each institution to participate in the decision making processes of the other. Secondly, each authority must have the right to intervene in any dispute adjudication before the other. If such a participation right is prescribed by allowing each institution an intervention right

in any dispute, then this will allow for a reasonable degree of inter-institutional communication. Finally, the competition commission and regulator may be given precise roles in any regulated industry. For example, in the EU the competition authority is allowed to define the 'relevant market' while the regulator evaluates market positions and abuse of dominance and other issues. In such a set up, the competition authority must exercise utmost forbearance in regulated industries.

The present legislative and institutional framework governing regulation and competition commission is minimalist and leaves far too much to the maturity of institutional actors. A cursory glance at inter-regulator coordination even under a single regulatory statute like the Electricity Act 2003 shows that there is a wide degree of variance in performance parameters and appreciation of roles across different state regulators and the central regulator. In this institutional environment, it is naive to leave this area of potential conflict and gridlock to be worked by the institutional wisdom which resides in each authority. There is need to review these issues in greater detail with a view to defining a workable division of labour between the regulator and the competition commission as also for eliminating the possibilities of forum shopping.

### ***Multi-Sectoral Regulators***

Drawing from international experience from several countries, India should consider opting

for multi-sectoral regulators such as for (a) communications; (b) electricity, fuels and gas, and (c) transport. This would eliminate proliferation of regulatory commissions, help build capacity and expertise, promote consistency of approach and save on costs. The Central government would take a decision on a case by case basis about the institutional location of the multi-sectoral regulator. In the case of States, a single regulatory commission for all infrastructure sectors may be more productive and cost-effective as compared to sectoral regulators for each sector. States should be encouraged to consider this approach and the scope of their existing electricity regulators could be extended to other sectors.

### ***Appellate Tribunals***

The effectiveness of regulators can be severely compromised if their decisions get locked up in appellate courts. Constitution of appellate tribunals on the lines of telecom and electricity appellate tribunals would help address this concern. These tribunals should be headed by eminent persons of judicial background and may consist of subject-matter specialists.

Separate appellate tribunals could be constituted for the three major segments, i.e., energy, communication and transport. The other approach could be to constitute a single appellate tribunal for all regulatory commissions with regional benches. The respective merits of these two options could be evaluated before arriving at a conclusion.

### ***Directions to Regulatory Commissions***

In a well-functioning regulatory framework, the need for issuing directions should not arise. However, there could be exceptional situations where the government may find it necessary to issue directions to a regulatory commission. Such directions should be issued with the prior approval of the Prime Minister and placed on the table of both the Houses of Parliament.

### ***Other Issues***

Other issues that need to be addressed while evolving a regulatory philosophy include transparency and predictability in regulatory approach and functioning. Further, in an environment where regulatory experience and skills are limited, the need for capacity building assumes greater significance and requires attention.

## **G. Way Forward**

The issues and options identified above have been subjected to an extensive debate among stakeholders with a view to arriving at a consensus. It is recognised that the next stage would require evolution of a draft Bill for giving effect to the overarching principles of regulation laid out above. As and when a broad consensus emerges from further consultations, the draft Bill could be considered for enactment with a view to adopting a cogent and consistent philosophy of regulation cutting across different sectors.

The proposed statute would, of course, continue to be supplemented by the existing sector specific legislations that set out specific objectives to be achieved in each sector.









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