

Romancing the DoT: LIRNEasia's Policy Interventions in India



Payal Malik

**LIRNE.NET – IDRC Meeting,
Ottawa**

June 23, 2008



Interventions and outcomes

- Key engagements with policymakers, regulators and industry in India and media reporting
 - Universal Service Obligation
 - Infrastructure sharing
 - Access Deficit Charge (ADC)
 - Spectrum
 - Indicators
 - Interactions with Industry
 - LIRNEasia in Media



Universal Service Obligation - Interventions

- LIRNEasia: Regulation and Investment Paper, September 2004
- LIRNEasia's response to Telecom Regulatory Authority of India's Consultation Paper 16/2004: Growth of Telecom Services in Rural India: The Way Forward, October 27 2004:
 - Key recommendations -**
 - Extending Universal Service financing to mobile
 - Infrastructure sharing
- Early USO research presented at WDR expert forum attended by TRAI Secretary Rajendra Singh, September 2005 → paper goes to TRAI

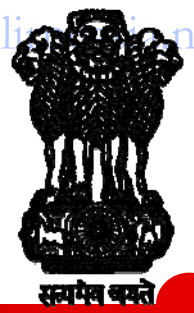


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Universal Service Obligation - Interventions

- Indian Express, op-ed piece by Payal Malik - Rural telephony: TRAI got it right finally!, October 31, 2005
- Conversation with Shanthanu Consul, administrator USF, DoT at ITU Telecom World; December 2006
- Meeting with USF administrator: Sharing of the BoP results and backhaul infrastructure study done by HV Singh; March 2007





Universal Service Obligation - Outcomes

- TRAI recommendations on Growth of telecom Services in Rural Areas October 2005 reflect LIRNEasia recommendations
- DoT floats the idea of USO to mobiles, August 2, 2006
- USO Auctions for creation of mobile infrastructure and sharing of passive infrastructure so created, March 14, 2007





Infrastructure sharing - Interventions

- Discussion on LIRNEasia Blog on Infrastructure sharing, May 2005 onwards
- HV Singh, Secretary TRAI (on leave) wrote a research paper on economics of backhaul infrastructure; published in LIRNEasia book (Sage 2008) as “One backbone, or two?”
- HV Singh Presentation of LIRNEasia USO study results at the India Policy Forum, NCAER, attended by TRAI and DoT officials and presided over by MS Ahluwalia, Deputy Chairman Planning Commission, July 2005
- **Samarajiva** participated in Third Annual ‘**Joint Roundtable on Communications Policy - The Future of Indian Mobile**’ in Kovalam, India, 7-9 February, 2008, organized by the [Aspen Institute India](http://www.aspeninstitute.org) in collaboration with the [Aspen Institute](http://www.aspeninstitute.org), USA and CII, India. Key recommendations included:
 - Active Infrastructure sharing



सत्यमेव जयते

Infrastructure Sharing - Outcomes

- **November 2006 Consultation paper on infrastructure sharing**
- **April 2007 Recommendations on Infrastructure Sharing**
- **May 2008 DoT amends license conditions to allow for active infrastructure sharing**

TRAI said the operators may want to look at the possibility of sharing active infrastructure to reduce roll-out costs.

The regulator has also discussed other forms of sharing in the paper including common back-haul sharing in rural environment where traffic is very low.



सत्यमेव जयते

Infrastructure Sharing - Outcomes

Sharing of new passive infrastructure by mobile service providers – Copy of letter

Annexure 'A'
Handwritten: (AS) Immediate
Annexure - I

No. 10-5/2006/AS-III / 1825
Government of India
Ministry of Communications
Department of Telecommunications
Sanchar Bhawan, 20, Ashoka Road, New Delhi

Dated 8th November 2006

To ✓ The Secretary,
Telecom Regulatory Authority of India,
A-2/14, Africa Avenue,
Safdarjung Enclave, New Delhi-110028

Sub : Sharing of new passive infrastructure by mobile service providers.

Handwritten: 8/11/06

With the exponential growth of mobile services in the country, it is felt that the mobile service providers should be sharing the new passive infrastructure especially towers, while expanding the networks. This would not only bring down the cost of providing the service but also would help in preventing the deterioration of the skyline. One of the ways of ensuring this is to bring in a proper legislation (amendment in the license agreement) so that the new passive infrastructure like towers are effectively shared by the mobile service providers. While bringing in such a legislation it is to be ensured that the same should not come in the way of growth of mobile services in the country.

Undersigned is directed to seek the views of TRAI regarding bringing in an appropriate legislation/amendment in the license agreement for ensuring effective sharing of new passive infrastructure (towers) by the mobile service providers. In case the view is for bringing in appropriate legislation/amendment in the license agreement, the comments on the nature of such a legislation/amendment in the license agreement may also be provided.

Handwritten Signature
(Sukhbir Singh)
Director(AS-III)
Tel: 23711908



Reuters





Infrastructure Sharing - Outcomes

The Authority Recommends

Considering the importance of backhaul sharing for provision of mobile services in rural and far flung areas, licensing conditions of UASL clause no 33 (ii) and CMTS clause no 34 (ii) should be amended to allow service providers to share their backhaul from BTS to BSC only. Such sharing is permitted on optical fiber as well as Radio medium at port size E1 and multiple there of (nxE1). No sharing of spectrum at access network side is permitted.





Infrastructure Sharing - Outcomes

Hindu business Line:

In a move that would bring significant reduction in costs for rolling out telecom network, the Government has allowed operators to share all parts of the infrastructure except spectrum. This is expected to enable operators to save nearly 30 per cent of their costs which in turn will result in cheaper tariffs for consumers.

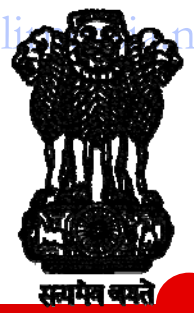
Business Daily from THE HINDU group of publications

Thursday, Nov 30, 2006

[ePaper](#)

<ul style="list-style-type: none"> • Home • News Update 	<p>Info-Tech - Telecommunications TRAI favours active infrastructure sharing</p>	<p>Stories in this Section Accenture opens tech lab in Bangalore</p>
<p>News</p>	<p>Our Bureau</p>	<p>700 VSNL staff opt for VRS</p>
<ul style="list-style-type: none"> • Front Page • Corporate • Markets • Info-Tech • Marketing • Money & Banking • Agri-Biz & Commodities • Industry & Economy • Logistics • Government • Opinion • Variety • Columns • States • Web Extras • Index • Archives 	<p><i>Mobile players may get to resell airtime</i></p> <hr/> <p><i>TRAI said the operators may want to look at the possibility of sharing active infrastructure to reduce roll-out costs.</i></p> <hr/> <p>New Delhi , Nov. 29</p> <p>In a significant move, the Telecom Regulatory Authority of India (TRAI) has taken the first step towards forming a policy that allows mobile operators to resell airtime to Mobile Virtual Network Operators (MVNO).</p> <p>MVNOs are companies who do not own any cellular infrastructure but buy airtime from operators and then market and sell it using their own brand.</p> <p>Companies like Virgin have made it big in this segment in markets such as USA and are now looking to enter the Indian space.</p>	<p>TRAI favours active infrastructure sharing</p> <hr/> <p>Telecom sector taxes may come under scanner</p> <hr/> <p>British Tele application 'deficient'</p> <hr/> <p>Idea services at Sabarimala</p> <hr/> <p>Ascendas may set up Rs 500-cr bio-IT park in Chennai</p> <hr/> <p>RR Ind plans township in Madurai</p> <hr/> <p>Semiconductor industry needs leg-up from Govt'</p> <hr/> <p>Huawei-3Com's new product range</p> <hr/> <p>TCS bags \$65-m deal from ITC co</p>

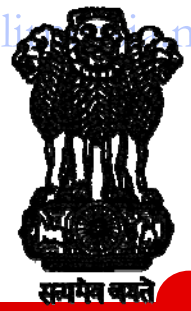




Access Deficit Charge (ADC) - Interventions

- ADC meetings with TRAI officials July/August 2005
- ADC Research paper by de Silva and Malik September 2005
- Book Chapter “Access Deficit Tax?” (Sage, 2008)
- LIRNEasia rapid response in January 2008: Comments on consultation paper on phasing out ADC





Access Deficit Charge (ADC) - Outcomes

- February 2006: Quantum reduced to USD 0.75 billion
- New Regime: In addition to ILD calls, ADC applicable as 1.5% of Adjusted Gross Revenue (AGR) of Access Providers, NLDO, ILDOs
- Further amended the IUC Regulation on 21.03.2007
- ADC on ILD outgoing traffic was abolished, the ADC on ILD incoming traffic was reduced to Rs.1.00 per minute and ADC was also reduced to 0.75% of AGR of Access Providers, NLDOs and ILDOs
- ADC phased out and merged with Universal Service Obligation (USO) regime from 2008-09



Access Deficit Charge (ADC) - Interventions

Consultation
Paper no.
2/2008 dated
21 st January
2008 on ADC

Comments from LIRNEasia:

- ① As envisaged in the IUC/ADC regulations, TRAI is operationalizing the phasing out of ADC from 1.4.2008. If you have a contrary view kindly explain.
(Page 7)
- ② Case for providing support to BSNL from USOF for their fixed wireline operations in rural areas.
(Page 21-22)
- ③ If yes, suggest a suitable framework specifying the details of implementation like amount of subsidy, period of support etc.
(Page 32)
- ④ Should the Authority, consequent upon abolition of ADC, mandate reduction of entry-level charges applicable for mobile subscribers in rural areas? If yes, suggest a suitable framework for implementation.
(Page 38-39)
- ⑤ Do you have any other proposal for making mobile services more affordable for rural subscribers?
(Page 47-48)



Spectrum - Interventions and Outcomes

- Participation in Third Annual **‘Joint Roundtable on Communications Policy - The Future of Indian Mobile’** in Kovalam, India from 7-9 February, 2008, organized by [Aspen Institute India](#) in collaboration with the [Aspen Institute](#), USA and CII.

Key recommendations:

- Refarming 700 MHz Band
- Radio Signals right op-ed piece by Payal Malik in Indian Express on “Spectrum Auctions” - December 2007

- Action should be taken to refarm the 700 MHz band for use in wireless access networks expeditiously and to assign the cleared frequencies in minimum blocks of 15 MHz (coupled) by transparent means across multiple circles
- DoT auctioning 3G spectrum to current as well new players.

LIRNEasia indicators work

- TRAI and LIRNEasia Indicators workshop in New Delhi, March 1-3, 2006, attended by OECD and ITU experts
- OECD Commissioned LIRNEasia Senior Research Fellow, Payal Malik to write paper “Documenting Capabilities of Measuring ICT in India”
- Paper presented at WPIIS meetings at London, May 21, 2007
- OECD with LIRNEasia Senior Fellow and Department of Information Technology, DIT, organized a workshop in India: Measuring Information Society, Making India a Knowledge Economy, November 19-20, 2007.



LIRNEasia meetings with Industry

- LIRNEasia's Executive Director and Lead Economist participated at 10th annual telecom conference and exhibition organized by Informa Telecoms and Media, GSM 3G, in Mumbai, India on 22-23 January, 2006
- Harsha de Silva presented the Indian findings of 'Teleuse @ BOP 2' during the session entitled 'Connecting the Next Billion': Rohan Samarajiva chaired universal service panel which included Administrator of US Fund → led to invitation to 2 hour presentation in New Delhi



LIRNEasia in Media

The Hindu Business Line: Call of the village

Business Daily from
THE HINDU group of
publications Monday,
Apr 02, 2007

Affordability is key

According to a new study done by LIRNEasia and AC Nielson, close to 100 million new cellular subscribers are expected to come from the rural areas over the next two years and the prospective subscribers are reasonably heavy users, making an average of 40 calls a month.

However, analysts caution that while operators are rolling out networks to the remote and poor areas, they also need to bring down the cost of owning a phone if they want to penetrate a highly budget-conscious rural market.

Says **Prof Rohan Samarajiva, LIRNEasia**, "Our study revealed that 82 per cent of the respondents did not own a phone because they could not afford it. While the current entry cost of owning a phone is perceived to be higher than \$25, the rural population is not willing to pay more than \$10.

Business Line
Business Daily from THE HINDU group of publications
Monday, Apr 02, 2007
ePaper

Conference Themes
RFID for Manufacturing Excellence On 25 - 27 NEHRU CENTER, WORLI, MUMBAI

'LIVE APPLICATIONS' INDIA 2007
RFID EXPO
UNIVERSITY MICROFILMS
INDIA 2007

IT HIGHWAY
Plots from Rs. 40 Lakhs onwards

Home
News Update

Home Page - Telecommunications
eWorld - Insight
Call of the village
Thomas K Thomas

Indian telecom operators are vying with each other to connect the countryside. eWorld tracks the great rural rush.

While the current entry cost of owning a phone is perceived to be higher than \$25, the rural population is not willing to pay more than \$10.

It's not just the Star Trek's famous Enterprise space ship that's gone where no man has gone before.

Indian private mobile companies are embarking on a major plan to roll out services to the remotest and the poorest parts of India, where no telecom entrepreneur has dared to venture till now, over the next year, to ensure that every person living in

Investment World
eWorld
Brand Line
Mentor
Life
Canvas
Praxis
Urban Pulse
Brand Quest
The New Manager

Quotes
SE Diary
Scoreboard
Open-End Mutual Fund

Rates

Hiring

Telecom
Find Deals, Read Reviews from Real People. Get the Truth. Then Go. www.TripAdvisor.com

Traffic in India
An evaluation of World Bank support for transportation projects www.worldbank.org/india

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LIRNEasia in Media

Fact or fiction – Telecommunications in Asia

The Hindu:
Chennai
edition
Dec 17, 2007

Fact or fiction: Telecommunications in Asia

At a time when GSM operators, Telecom Regulatory Authority of India (TRAI) and the Department of Telecommunications (DoT) are at an imbroglio over spectrum allocation, Prof Rohan Samarajiva's book, *ICT Infrastructure in Emerging Asia: Policy and Regulatory Roadblocks*, makes for a timely read.

In Chennai for the launch of the book, Samarajiva, Executive Director of LIRNEasia and former Director General of Telecommunications in Sri Lanka, spoke to *Liffy Thomas* on Information and Communication Technology connectivity in Asia.

What is your take on the whole spectrum row?

India's wireless system is the most loaded. It has more fibre connectivity than any other South Asian country, but it is not well-channellised. The best India can do is have an auction and allocate spectrum.

Does your book come with any regulations for the Indian government in particular?

The legality about spectrum is not clear in most countries. As this is a very recent issue in India, we haven't touched on the topic elaborately. We have spoken about

"unlicencing spectrum"; how Wi-fi laws in Indonesia have been used in the most unusual way, etc.

Some of LIRNEasia's upcoming projects and studies?

Mobile 2.0 is an interesting project we are working on, where we are studying how mobile payment can be done via cellphones

Are India's telecom tariffs one of the lowest?

We have done a study on the subject where we have showed that India can further bring down its telecom charges. India is a growing economy and is the destination of choice for many outside players.

What are the broad sectors your book looks at?

We have brought together scholars, former regulators and policy makers to address the problem of expanding information and communication technology.

The book covers Nepal, Bangladesh, Sri Lanka, Indonesia and India. Like, in India, one of the main areas was Universal Service Fund (USF) - the second largest fund in India; new approaches to take communication forward; accessibility; deficit funds and competition in extending communication to rural areas. ■



LIRNE *asia* in Media

Policies for ICTs

The Hindu:
Chennai
edition
Dec 20, 2007

Excerpt from the article.....

The common perception remains that India has the lowest mobile phone tariffs, other countries like Pakistan, Bangladesh and Sri Lanka have lower tariffs than India.

Talking about the new book ICT Infrastructure in Emerging Asia – Policy and Regulatory Roadblocks, Prof Rohan Samarajiva said, the book is the outcome of the research done on telecommunications in India. It rests on an assumption that connectivity is the opportunity to engage in electronically mediated communications and is good. He aims to make the book a nice reference copy for those wanting to check anything about telecommunications.

Policies for ICT



WHILE the common perception remains that India has the lowest mobile phone tariffs, other countries like Pakistan, Bangladesh and Sri Lanka have lower tariffs than India, Rohan Samarajiva, executive director, LIRNE Asia, writes Tuesday.

Talking about his new book *ICT Infrastructure in Emerging Asia - Policy and Regulatory Roadblocks*, he said, when compared to all these countries, India's cost is much higher.

The book is the outcome of the research done on telecommunications in India. It rests on an assumption that connectivity is the opportunity to engage in electronically mediated communication and is good. The book is an engaged material on the research done and put together said Samarajiva. He aims to make the book a nice reference copy for those wanting to check anything about telecommunications. The book deals with different telecommunication policies of different countries like Indonesia, Sri Lanka and Bangladesh and addresses the problem of expanding information and communication technology (ICT) connectivity in Asia.

On being asked about the ongoing spectrum war within the Indian mobile phone companies, he said, "The Indian government should come out with an auction that could solve the problem, but the auction should be a properly designed one which fits only certain criteria and the outcome becomes a fair one. That way, the matter could be solved and everyone gets a fair share of it."

— Express Feature

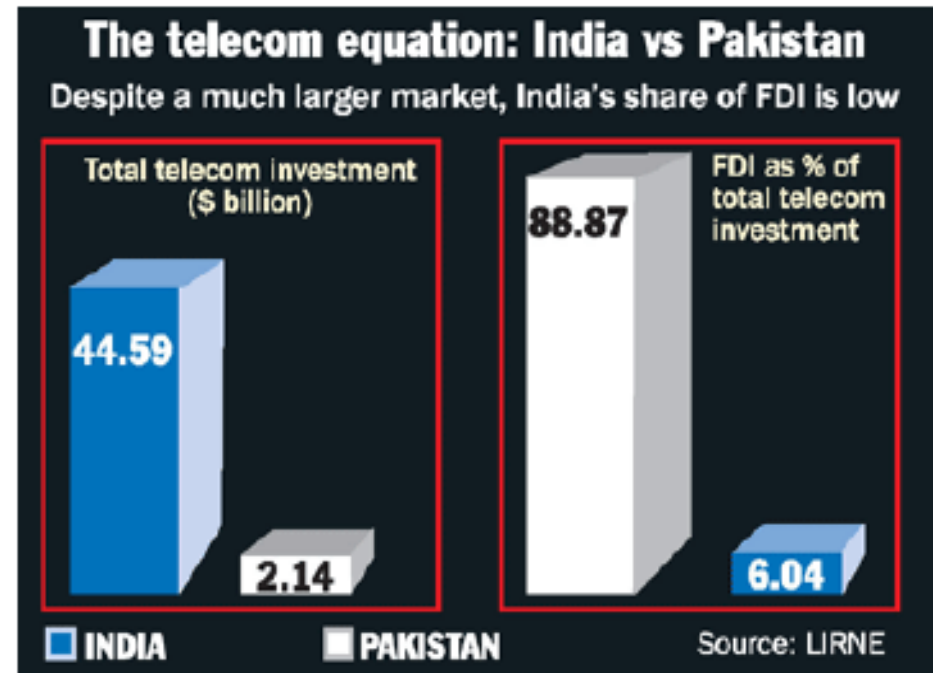
LIRNEasia in Media

Telecom Regulation: Pak Better India

A study by Colombo-based LIRNE Asia (Learning Initiatives on Reforms for Network Economies) claims that the telecom regulatory mechanism in India is way behind Pakistan in five of the six parameters it considered.

The Telecom Regulatory Environment 2006 has compared six countries including India, Pakistan, Sri Lanka, Indonesia, Thailand and the Philippines. Not surprisingly, India leads the pack on price. However, it lags behind on market entry, spectrum, interconnection, anti-competitive procedures and universal service obligations.

Says Rohan Samarajiva, executive director, LIRNEasia: "There is plenty of room for improvement. India is dragged down in TRE by spectrum and universal service obligation." He points out unlike in India the regulatory body in Pakistan plays a big role in policy too.



THANK YOU

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www.lirneasia.net