

## VISION OF INDIAN TELECOM SECTOR - 2020

**M. Jayanthi, Dr. K. Gomathi**

<sup>1</sup>M. Com, M.Com., <sup>2</sup>M.Phil., P.C.P., Ph.D, Assistant professor

S.T.E.T. Women's College, Mannargudi, Thiruvarur District, Tamilnadu, India

### Abstract

The purpose of this paper is to construct a vision of Indian telecom sector for the year 2020, i.e., about two decades from now. Development being a continuous process, the choice of the year 2020 is just an arbitrary division of time, a pre-defined time horizon to take stock of what is likely to be achieved. Pre-portrayal of a stage of development in future requires understanding of the process of change, the dynamics that set law of motion. In attempting to do so, the present paper deciphers the recent past. Process of change is often volatile and responsive to intervention and global circumstances impacting it. In such an inherently dynamic situation it is convenient to assume that cross-country experiences incubate the most recent seeds of change. Economic reforms and liberalization have driven telecom sector through several transmission channels of which these three categories are of major significance. The paper, as it unfolds, is divided into six sections. Section 1 gives a brief account of the era of competition that was heralded in Indian telecom sector and the results achieved. Analysis of the results, particularly comparison with other major countries intrigued further discussions on economic structure, synergy between telecom and IT, competition policy and technology in sections 2,3,4 and 5 respectively. Logical extension of the arguments, as they developed, extended to a vision for 2020 in each of these sections.

**Key words:** Development, telecom, technology.

### INTRODUCTION

India, like many other countries of the world, have adopted a gradual approach to telecom sector reform through selective privatization and managed competition in different segments of the telecom market. To begin with, India introduced private competition in value-added services in 1992 followed by opening up of cellular and basic services for local area to private competition. The Telecom Regulatory Authority of India (TRAI) was constituted in 1997 as an independent regulator in this sector. Competition was also introduced in national long distance (NLD) and international long distance (ILD) telephony at the start of the current decade.

The current policy stance affecting telecom sector in India is presented in the Appendix. Two state-owned public sector incumbents with a large existing subscriber base dominate the fixed line service. As on December 31, 2001, the two Public Sector Enterprises (PSEs), BSNL and MTNL owned 34.73 million Direct Exchange Lines (DELs) against 0.45 million privately owned DELs. These two PSEs were allowed belated entry into the cellular segment in the beginning of the present decade. Consequently, their cellular subscriber base is tiny compared to the private operators. Out of 7.3 million cellular subscribers in the country in June 2002, they had only 0.2 million subscribers.

Despite asymmetry in initial market endowments between public sector incumbents and private operators, the act of opening up of the market unleashed dynamism that was hitherto latent in the sector. This is evident from a number of performance indicators. In terms of overall size of main telephone lines in operation, India ranked 14<sup>th</sup> in the world in 1995. The rank improved to 7<sup>th</sup> position in 2001.

### ECONOMIC STRUCTURE

It has been observed that 'growth in the number of new telephone subscribers has far exceeded the growth in the global economy' in the last twenty years. This shows that aggregate growth alone does not determine telecom expansion and there may be need to look at composition of growth as well. However, influence of economic structure on telecom expansion (or for that matter on achievable level of tele-density) does not find explicit consideration in today's literature on telecom economics as much as the other two factors, i.e., competition and technology. One plausible reason could be because of the importance that has been attached to income gap as a factor explaining digital divide. Moreover, income gap, by itself subsumes differences in certain structural characteristics and therefore diverts the focus of attention from structural gap to income gap. Proponents of 'income determinism' may stop short of addressing structural factors because of their primary concern regarding income transfer between the developed to the developing countries as the only way to address the problems of digital divide. Structural issues, on the other hand, are more pertinent to the believers of 'leapfrogging' capabilities of the countries who are on the wrong side of the divide. It is for

them that the present paper goes on to prove that the effectiveness of direct promotion of telecommunications as a complementary policy to overall macroeconomic reforms will be determined in an important way by how structural issues in the economy are addressed.

In the first place, it is noteworthy that there are countries with per capita income less than that of India but with higher tele-density. As for instance, Bolivia had per capita income of US\$ 2380 in 2000 compared to US\$ 2390 for India. Bolivia's tele-density was 6.05 in that year against 3.20 for India. Moldova had a tele-density of 13.33 with a per capita income of US\$ 2240. Georgia, with a per capita income of US\$ 2470 had a much higher tele-density of 13.86. Though Ecuador had a little higher per capita income of US\$ 2920 compared to India, tele-density was significantly higher at 10.00. It was also noted that these countries had either more equitable income distribution than India (measured in terms of percentage of population living on less than \$2 a day) or had a higher weightage of value added by the service sector in the Gross Domestic product (GDP) or both.

### TELECOM AND IT

The vision of telecommunications in 2020 is a vision of information society built on an edifice where IT and telecommunications merge. Rapid technological convergence has already implied a symbiotic overlap between the development strategies of IT and telecommunications. Part of today's IT is 'telecom writ large', it flourishes on the telecom-network and in turn permits modern day telecommunications to use sophisticated IT-software. Hardware is a common platform for both IT and telecom.

There is a legacy vision derived from export-success of India's software that has given rise to optimism regarding India's growing pre-eminence in global IT canvas. Such a vision builds on a much larger vision of all round development of IT that pervades wide cross-section of Indian economy and society. Deeper analysis shows that there is need for a comprehensive IT development strategy to ensure India's durable presence in the global software market. As discussion in the subsequent paragraphs will show, 'enclave' type development of software with exclusive focus on export can not bring about desired benefits if such a strategy ignores the linkages between export and the domestic market. Vision 2020, therefore, is a much larger vision.

First, it is to be appreciated that foreign exchange contribution of software export net of import of hardware is roughly fifty per cent. Net foreign exchange contribution will increase if India is able to develop a strong base of hardware fastest growing segment of the global IT market consisting of software packages and software products. India's close competitors, on the other hand, have achieved greater success through diversification of exports with software packages. There is, therefore, need for India to climb value chain with more innovative software products in the international market. This is possible when India is able to broad-base the development of IT with a strong and large domestic market supporting innovation and its diffusion along with the growth of component manufacturing base. Appropriate synergy between the domestic and export market will be key to enduring success of Indian IT sector in overseas market and development of state-of-the art telecom infrastructure is a prerequisite to both.

Finally, development of human resources through IT education, training and skill development is fundamental to the whole process.

In India, TRAI Act was amended in January 2000, to remove some of the shortcomings observed earlier. The legislation aimed at, *inter alia*, protection of interests of service providers and consumers of telecom sector. With this amendment, recommendatory functions were separated from enforcement functions. A separate Telecom Disputes Settlement and Appellate Tribunal (TDSAT) was set up with both original and appellate jurisdiction. It became mandatory for the central government to seek prior recommendations of the TRAI before introduction of new services. TRAI's power to issue directions was restricted to only its enforcement functions. Direct appeal to the Supreme Court of India against an order of TRAI was provided for. Thus, neutrality of Indian telecom regulatory regime was ensured through reliance on multiple agencies for conflict resolution. TRAI had a proven record of maintaining neutrality. It had challenged several decisions of the Government of India.

### CONCLUSIONS

LDCs are experiencing fastest growth in telecom network. In the mid-90s, growth in total telephone subscribers per 100 inhabitants of the LDCs surpassed that of the developed countries. In 2001, LDCs surpassed emerging countries achieving the distinction of fastest among the three. Given the relationship between telecom expansion and growth, there is hope for narrowing down of digital-divide, provided, LDCs are able to sustain growth momentum in the long run. The vision is no doubt optimistic. It has been cited that some twenty years ago Tokyo had more telephones than the whole of African continent whereas today Africa has more than twice the number of main telephone lines than that of

Tokyo. It is but natural that markets in high-income countries saturate while expansion in developing countries continues unabated.

One notable break with the past is that with opening up of the developing economies and widespread sectoral reforms, catching up process has become faster. Developing countries with liberal policies have much better opportunity to leapfrog than before. Mobile experience of the low-income countries bears testimony to this process. India is a participant in this global process.

#### REFERENCES

- [1] VSNL, *16<sup>th</sup> Annual Report, 2013-2014*, p.5.
- [2] <sup>1</sup> *tele.net*, New Delhi, Vol.3, issue no.7, July 2014, pp. 54-55.
- [3] See for instance, Negroponte, N., 'The Third Shall be First: The Net Leverages Latecomers in the Developing World', *Wired Magazine*, January 2014.
- [4] Joseph K.J. and K.N. Harilal, 'Structure and Growth of India's IT Exports, Implications of an Export Oriented Growth Strategy', *Economic and Political Weekly*, August 25, 2011, p.3267.
- [5] <sup>1</sup> Chakraborty Chandana and C. Jayachandran, 'Software Sector: Trends and Constraints', *Economic and Political Weekly*, August 25, 2014, p.3258.