

# Competitive Landscape of Mobile Telecommunications Tower Companies in India

*N.P. Singh, Management Development Institute, India*

---

## ABSTRACT

*With the entry of 3G and WiMAX players, the Indian mobile subscriber base is expected to reach 1110 million by the end of 2015. To meet mobile infrastructure demand, India will require approximately 350,000 to 400,000 mobile telecommunications towers in the next 7 to 8 years. Presently only 40% of mobile telecommunications towers are shared in India. The high growth of subscribers and initial cost of mobile telecommunications towers and license conditions will force mobile network operators to share infrastructure with other mobile network operators, specifically with new operators. The Indian government has allowed sharing of passive and active components of mobile telecommunication infrastructure. With the changing demand of the telecommunications infrastructure, many new telecommunications tower business entities and companies and mobile telecommunications tower business models are being explored. In this paper, the author presents the landscape of the mobile telecommunications tower industry in India, which consists of four types of companies and trends with respect to the strategies of telecommunication tower companies, especially tenancy ratio. Emerging features of the mobile telecommunication towers industry in India are also presented.*

**Keywords:** *Business Models, Infrastructure Sharing, Joint Venture Companies, Mobile Network Operators (MNO), Mobile Telecommunications Towers, Mobile Telecommunication Tower Valuation, Telecommunication Circles*

---

## INTRODUCTION

In general mobile telecommunications tower business needs high initial investment and time due to right of way etc. Once it is settled then it is stable and results in predictable cash flows (fixed income for longer duration agreements), low working capital requirement (even that can be passed on to the tenant) and high profitability (with increase in tenancy ratio). The

mobile telecommunications towers industry in India is a profitable business with long-term growth forecast. The major factors for mobile telecommunications tower industry growth in India are (i) large number of operators in a telecommunications circle (12 mobile network operators perceived during 2007 (Beniwal, 2007), (ii) growth of mobile telecommunication subscribers, (iii) competitive telecommunications tower market, (iv) large coverage area of the country, (v) falling average revenue per user (ARPU)/ Margins, (vi) high Minutes of Usage

DOI: 10.4018/jitn.2010010104

(MOU) & emergence of new technologies, (vii) spectrum scarcity, (viii) low tele-density which is increasing at a faster pace, (ix) emergence of 3G and WiMAX, (x) entry of new mobile network operators, (xi) push for better quality services by the regulator and subscribers, and (xii) investment in tower infrastructure is profitable (Rashmi, 2006). In addition, sharing of mobile telecommunication infrastructure will further boost the mobile telecommunications tower business. In days to come it may not be evaluated in terms of numbers telecommunications towers but in term of profitability per telecommunications tower. It will give birth to new business models and create an environment for more and more innovations. Even the passive telecommunications infrastructure components are now becoming a center of activity for telecommunications tower companies as well as for mobile network operators. In the market, there are various classifications of mobile telecommunications towers based on (i) cross section of telecommunications tower (Square Towers, Triangular Towers, and Delta Towers), (ii) type of material sections (Angular Towers, Hybrid Towers (legs tubes & bracings angles), and placement of telecommunications tower (Ground Based Towers (it can accommodate 3 to 6 tenants with present design), Roof Top Towers (it can accommodate maximum 2 tenants with present design). Other categories of mobile telecommunications towers are guyed masts and Cell on Wheels (COW) mobile telecommunications towers. Guyed masts are available at lower cost in comparison to self supported towers. Cell on Wheels (COW) mobile telecommunications towers were designed to respond to a need for rapid deployment telecommunications system and it provides quick, convenient communications capabilities for short or long term use without the hassle of installing permanent foundations, costly construction and regulatory restrictions. In India it takes about 45 to 60 days for erecting the telecommunications tower.

India is divided into 23 telecommunication circles for the purpose of managing telecommunications services in the country. These

23 telecommunications circles are further categorized as metros, type A, B and C based on population and tele-density. The figures of mobile subscribers and forecasted figures of mobile subscribers given in Table A.1, Table A.2, Table A.3 and Table A.4 are suggestive of high growth of telecom towers in India. The comparative growth of mobile and fixed line subscribers given in Table A.2 suggests that mobile telecommunication will be the communication system in future in India. The factors responsible for that are life time validity schemes, low cost handsets, low cost services, low long distance (STD) charges, low roaming charges and flood of value added services (Prashant, 2007a). He also mentioned that winning strategy will in reducing the CAPEX and OPEX to the mobile network operators which is possible with optimal and efficient use of mobile telecommunications towers (Prashant, 2007).

The mobile telecommunications tower market in India is expected to witness 17% p.a. growth from 2008-2015 with the estimated requirement of 554,000 mobile telecommunications towers by 2015 as per Reuters (2009) but with continuous increase in tenancy ratio, this number will be much less. The number of mobile telecommunications towers of the major mobile telecommunication tower companies given in Table A.5 suggests that mobile telecommunication tower companies are hiving off their telecommunications tower business into new entities for efficiently managing their infrastructure. Telecommunications tower is one of the major components of mobile telecom infrastructure and had a very high impact on telecommunications services cost to the subscribers as well as to mobile network operator.

Indian telecommunication tower industry has witnessed many changes in the last few years and there is a need to analyze it. This research paper is an attempt to analyze various aspect of telecommunication tower industry. The article presents a detailed analysis of telecommunications towers, telecommunications tower companies and their share in the Indian markets including their future strategies

31 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/article/competitive-landscape-mobile-telecommunications-tower/40962](http://www.igi-global.com/article/competitive-landscape-mobile-telecommunications-tower/40962)

## Related Content

---

### Process Scheduling in Heterogeneous Multiprocessor Systems Using Task Duplication

Pranay Chaudhuri and Jeffrey Elcock (2010). *International Journal of Business Data Communications and Networking* (pp. 58-69).

[www.irma-international.org/article/process-scheduling-heterogeneous-multiprocessor-systems/40914](http://www.irma-international.org/article/process-scheduling-heterogeneous-multiprocessor-systems/40914)

### Classification of Dataflow Actors with Satisfiability and Abstract Interpretation

Matthieu Wipliez and Mickaël Raulet (2012). *International Journal of Embedded and Real-Time Communication Systems* (pp. 49-69).

[www.irma-international.org/article/classification-dataflow-actors-satisfiability-abstract/62992](http://www.irma-international.org/article/classification-dataflow-actors-satisfiability-abstract/62992)

### Designing a Resilient and High Performance Network

Abid Al Ajeeli (2009). *Selected Readings on Telecommunications and Networking* (pp. 105-119).

[www.irma-international.org/chapter/designing-resilient-high-performance-network/28716](http://www.irma-international.org/chapter/designing-resilient-high-performance-network/28716)

### A Novel Dynamic Noise-Dependent Probabilistic Algorithm for Route Discovery in MANETs

Hussein Al-Bahadili and Alia Sabri (2011). *International Journal of Business Data Communications and Networking* (pp. 52-67).

[www.irma-international.org/article/novel-dynamic-noise-dependent-probabilistic/50481](http://www.irma-international.org/article/novel-dynamic-noise-dependent-probabilistic/50481)

### Revisiting the Gatekeeping Model: Gatekeeping Factors in European Wireless Media Markets

Vassiliki Cossivelou and Philemon Bantimaroudis (2011). *Interdisciplinary and Multidimensional Perspectives in Telecommunications and Networking: Emerging Findings* (pp. 216-231).

[www.irma-international.org/chapter/revisiting-gatekeeping-model/52185](http://www.irma-international.org/chapter/revisiting-gatekeeping-model/52185)