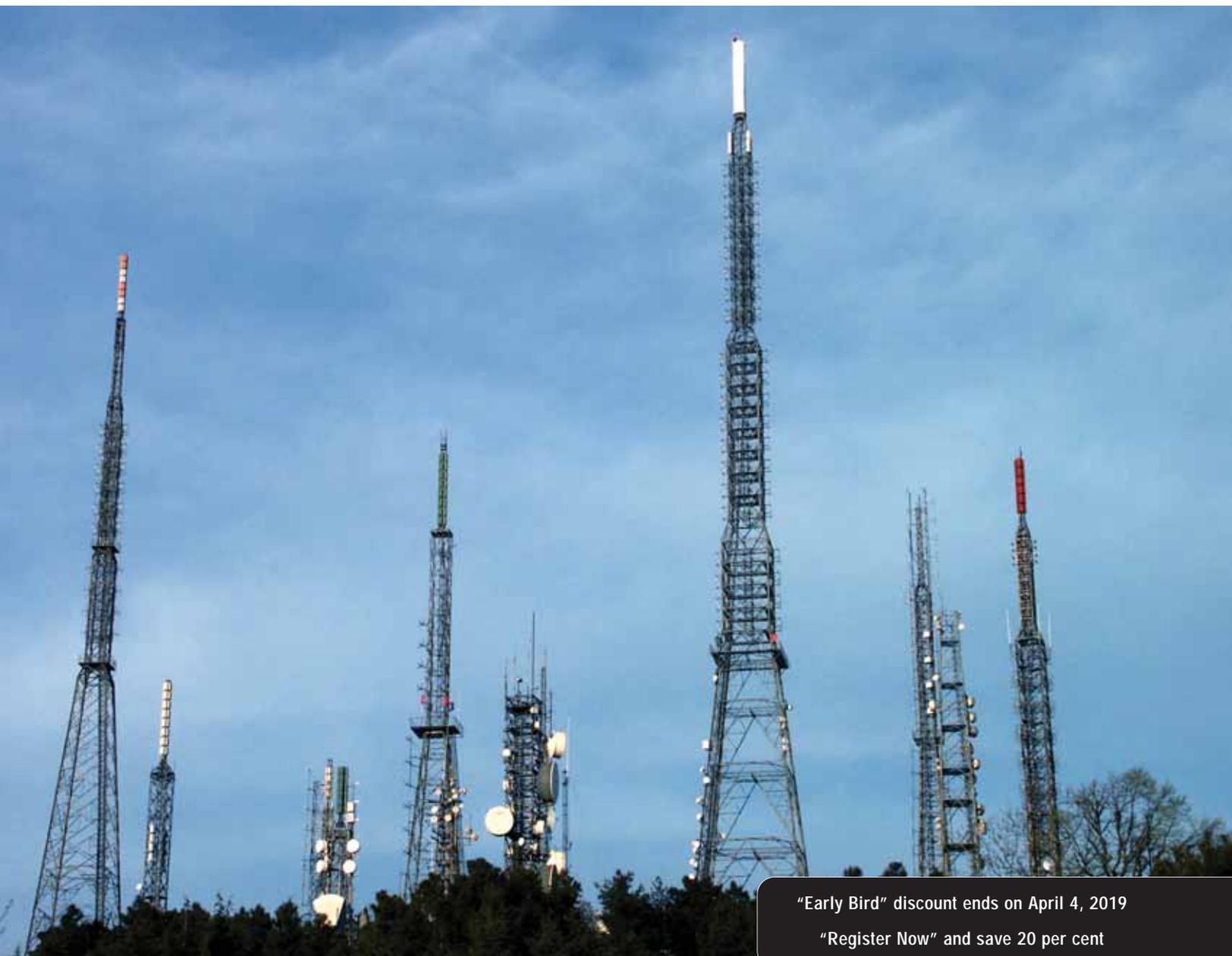13th Annual Conference on

TELECOM INFRASTRUCTURE IN INDIA

Mainstreaming 4G and Preparing for 5G

April 25-26, 2019, The Leela Ambience, Gurugram

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Organisers:

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TELECOM INFRASTRUCTURE IN INDIA

Mission

- The Indian telecom sector is on a new growth trajectory. Mobile networks are fast transitioning to 4G. The country is gearing up for 5G services. Fibre deployments are growing rapidly. And new business opportunities such as Wi-Fi, in-building solutions (IBS), active equipment and data centres are gaining traction.
- The pace at which the country has adopted 4G is phenomenal. It took seven months to reach the milestone of 100 million 4G subscribers, against eight years for 250 million connections on 3G.
- Data consumption is at its peak and growing further. At 2,360 PB, the country's data consumption in 2018 was the highest in the world. India has become the second largest market for social networking giants such as Facebook and LinkedIn and is soon expected to surpass the US.
- The massive growth in wireless connectivity and broadband infrastructure is also driving directional changes in the way businesses function across verticals. So much so that it has become a facilitator for digital platforms to displace physical world ecosystems. A prime example is the cab aggregator market.
- All this has been achieved through the government and industry aligning their efforts towards a mobile-cum-broadband powered Digital India.
- Concerted efforts have been made to develop a robust telecom infrastructure by accelerating fibre deployment, implementing a universal RoW policy, allowing 605 MHz of spectrum for Wi-Fi services, establishing a framework for a public data office and removing cascading taxation from the virtual network operator regime. Initiatives such as Smart Cities and Startup India have also created opportunities for telecom players.
- The most noteworthy development has been the launch of the NDCP 2018. Its impact on towercos in terms of increasing tower fiberisation, rolling out fibre on government premises, streamlining approval processes, mandating IBS, incentivising clean energy usage, and allowing IP-1s to roll out and share active infrastructure with operators would pave the way for transforming IP-1s to network companies (netcos). The policy rightly addresses various 5G-pertinent topics as well.
- Meanwhile, the telecom industry seems to have achieved the right structure and is slowly finding its way out of controversies and stressed financials. There are signs of recovery - operators are raising capital and focusing on new technology roll-outs or operational efficiencies. Towercos have also progressed in terms of leveraging opportunities such as smart cities, fibre, micro and macro-sites, and IBS.
- However, a lot more needs to be done. Energy costs should be further optimised through better solutions and business models. The successful tower sharing model has to be replicated in other infrastructure set-ups such as Wi-Fi, active equipment and data centres to ensure faster time-to-market and reduced costs for telcos. There also needs to be a greater impetus to the deployment of next-gen services such as IoT, robotics and AI.
- The mission of this conference is to highlight critical telecom infrastructure-related issues and concerns for the government and the industry to deliberate on, and assess new and upcoming opportunities. It will attempt to point out the initiatives required to address both supply and demand-side issues, to achieve India's ambitious mobile and broadband targets. It will also provide industry stakeholders a platform for sharing experiences and showcasing the latest innovations and technologies.

Target Audience

The conference is targeted at:

- Telecom operators
- Energy efficient technology providers
- Financial institutions
- Policymakers and regulators
- Energy management consultants
- OFC manufacturers
- Infrastructure service providers
- Industry analysts

- Telecom tower manufacturers
- Broadband service providers
- Wireless internet service providers
- Infrastructure equipment manufacturers
- Civil contractors
- 4G service/solution providers
- Legal and management consultants
- Infrastructure developers

- 5G technology providers
- Supporting infrastructure companies
- Other investors
- Technology providers
- Renewable energy companies
- Power solution providers
- Engineering design consultants
- Telecom equipment manufacturers

Previous Participants

The companies that participated in our previous conferences on **"Telecom Infrastructure in India"** *include:* Aceline Infosolutions, ACME Cleantech Solutions, AKSH Optifiber, Amara Raja Batteries, Analysys Mason, Apar Industries, Applied Solar Technologies, Ardom Telecom, Arvind, Ascend Telecom Infrastructure, ATC India Towers, B4S Solutions, BBNL, Bharat Sanchar Nigam Limited, Bharti Infratel, Black & Veatch, BMR Advisors, Capitel Partners, Care Rating, CESC, China Telecom, COAI, Copius Capital Advisors LLP, Corning Technologies India, Coslight India Telecom, CRISIL, Customized Energy Solutions, Cyient, Delta India Electronics, DSM India, Edotco Group, Emerson Network, Enersys India Batteries, Enterprise Ireland, Ernst & Young LLP, Essential Energy India, Evalueserve, Exide, GAIA Smart Cities, GE Grid Solutions, GTL Infrastructure, HBL Power, Huawei, ICICI Bank, Idea Cellular, IDFC Alternatives, IDFC Bank, IIFCL, Indus Tower, Infokool, Infozech, Intelligent Energy, Invendis Technologies India, Karam Industries, Keith Electronics, Khika, Kirloskar Oil Engines, Kotkar Energy Dynamics, KPMG, L&T Construction, MACOM Technology Solutions, Mahindra & Mahindra, Manifold, Microtex Energy, Morrison Hershfield Corp, Motilal Oswal, MTNL, NEC Technologies India, Nokia Networks, OMC Power, Owens Corning, Panasonic India, Paramount Communication, Polycab, PowerGrid, Pratap Technocrats, Protiviti, PRS Permacel, Quality Austria Central Asia, Ramboll, RBC Capital Markets, Reliance Jio Infocomm, Rosenberger Electronic Co., RV Solutions, SBI Capital Markets, Secure meters, Sify, Spectranet, Speedon Networks, Sterlite FTTH, Sterlite Technologies, Suyog Telematics, Svarn Group, Synergy Telecom (P), Tafe Motors, TAIPA, Tarantula, Tata Communication, Techlineage, Technica Associates, Tek Components, Telecom Network Solutions, TelEnergy Technologies, Tirumala Seven Hills, TAIPA, Tower Vision, Trading Engineers (International), Ubico Networks, Vanu India, Vertiv, Videocon Telecom Tower, Viom Networks, *etc.*

AGENDA/STRUCTURE

FROM TOWERCOS TO NETCOS
- ❖ What are the emerging trends in the telecom infrastructure (tower and fibre) space? What are the key metrics?
- ❖ What are the new opportunities for these players? What are the key challenges?
- ❖ Are netcos a feasible option in the Indian scenario? What will it take for IP-1s to transform into netcos?

TOWERCOS' PERSPECTIVE
- ❖ What are the key challenges plaguing the tower industry? How can these be addressed?
- ❖ What are the opportunities presented by initiatives such as the Smart Cities Mission and Digital India?
- ❖ What is the industry's readiness for 5G roll-outs? What are the other key focus areas for the coming years?

THE 4G EXPERIENCE
- ❖ What has been the sector's experience in transitioning to 4G services? How has the uptake been?
- ❖ What are the emerging trends? How are the network requirements changing?
- ❖ What are the global best practices? What is the 4G demand outlook?

PREPARING FOR 5G
- ❖ What is the possible spectrum auction timeline? What is a realistic timeline for the launch of 5G services?
- ❖ Is the country ready for 5G roll-outs? Are operators financially stable to make investments in 5G?
- ❖ What does it imply in terms of data speeds and consumption patterns?

NDCP 2018: LIKELY IMPACT AND THE WAY FORWARD
- ❖ What are the key provisions for the telecom infrastructure segment?
- ❖ How will the policy address the ongoing and potential challenges faced by the sector?
- ❖ What are the new opportunities highlighted under the policy? What are the gaps?

RIGHT OF WAY: CURRENT STATUS AND THE WAY FORWARD
- ❖ To what extent has the RoW issue been resolved? What has been the policy implementation experience?
- ❖ What are the reasons for some states adopting or not adopting these rules?
- ❖ How can the telecom industry work in collaboration with various departments to resolve this further?

EMERGING REGULATORY SCENARIO
- ❖ What are the key regulatory challenges related to the Indian telecom infrastructure space?
- ❖ What have been the key initiatives in this regard?
- ❖ What are the key regulatory priorities for the sector, going forward?

ACTIVE INFRASTRUCTURE SHARING
- ❖ What are the resolved and unresolved challenges related to active infrastructure sharing?
- ❖ What are the economic benefits of active infrastructure sharing? What has been the industry experience?
- ❖ Is the regulatory environment conducive for such sharing in India?

MEETING HIGH BANDWIDTH DEMAND: TOWERCO AS AN FTTX PROVIDER
- ❖ What is the business case for a tower infrastructure provider to invest in fibre networks?
- ❖ What are the ongoing trends in this regard?
- ❖ What are the key challenges in becoming an FTTx provider?

SMALL CELLS AND IN-BUILDING SOLUTIONS
- ❖ What is the current status of small cell, microsite and IBS roll-outs?
- ❖ What are the key issues and challenges in implementing these solutions?
- ❖ What is the market outlook?

WI-FI: OPPORTUNITIES AND BUSINESS MODELS
- ❖ What is the market potential for Wi-Fi solutions in India?
- ❖ What have been the key initiatives in this regard?
- ❖ What are the emerging business models?
- ❖ What are the major challenges?

SMART CITIES AND IoT
- ❖ What has been the experience of telecom companies under the government's Smart Cities Mission?
- ❖ What are the types of opportunities for telecom players?
- ❖ What are the key challenges? What are the possible business cases?

CO-LOCATION OF DATA CENTRES ON TOWER SITES
- ❖ What is the economic case for co-locating data centres on tower sites?
- ❖ What has been the experience so far?
- ❖ How can this be facilitated?

ENERGY MANAGEMENT SOLUTIONS AND SERVICES
- ❖ What are the current energy cost trends in the telecom infrastructure space?
- ❖ What are the current practices adopted by towercos to ensure energy efficiency?
- ❖ What is the current level of adoption of renewable energy solutions? What is the business case?

GROWING PLAY FOR DATA ANALYTICS
- ❖ What is the role of data analytics in improving telecom infrastructure services?
- ❖ What is the current state of adoption of analytics services by telecom service providers in India?
- ❖ What are the emerging trends globally?
- ❖ What is the future outlook?

QoS CONCERNS: HANDLING DATA SURGE
- ❖ What are the data consumption trends across user segments and business verticals?
- ❖ Are the telecom networks in India prepared to handle the expected data growth?
- ❖ What are the possible and available solutions on the network front?

TOWER DESIGN AND STRUCTURES
- ❖ What are the emerging tower design and material trends?
- ❖ What are the cost implications of the new designs?
- ❖ What are the key issues and challenges?

Organisers

*The conference is being organised by **India Infrastructure Publishing**, the leading provider of information on the infrastructure sectors through magazines, newsletters, reports and conferences. The company publishes **tele.net**, **Indian Infrastructure**, and **Renewable Watch** magazines. In addition, it publishes **Telecom News** (a weekly newsletter). The group also operates www.tele.net.in, India's most comprehensive telecom website.*

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One delegate	18,000	3,240	21,240	335	22,500	4,050	26,550	418
Two delegates	30,000	5,400	35,400	585	37,500	6,750	44,250	732
Three delegates	42,000	7,560	49,560	836	52,500	9,450	61,950	1,045
Four delegates	54,000	9,720	63,720	1,087	67,500	12,150	79,650	1,359

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- Registration will be confirmed on receipt of the payment
- To register online, please log on to http://indiainfrastructure.com/conf.html

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