

# Indian Telecom Sector- An Assessment of 'Indian Telegraph Right of Way Rules, 2016'

Under the guidance of

Dr. Sapna Chadha

By

Manish Kumar Agarwal Roll No. 4802

### Introduction

- Telecommunications has been widely recognized as an enabler of socioeconomic development of a country
- A robust and reliable telecommunications infrastructure (optical fibre, towers, cables etc.) provides the basic foundation for telecom services
- One of the major concerns in expansion of the telecom infrastructure getting affordable and timely Right of Way (RoW) permissions
- Telecommunications -Central subject; permissions mostly granted by the respective States / local bodies.
- Union Government notified the 'Indian Telegraph Right of Way Rules, 2016' on 15<sup>th</sup> November, 2016
- Wide variations across States, Local Bodies & Central authorities due to non-alignment with Indian Telegraph Right of Way Rules, 2016 fees, process, charging mechanism, site restrictions, denial without reason etc.
- Roll out of 5G requires street furniture for small cells- new dimension to the problem

### **Objectives**

- To understand the 'Indian Telegraph Right of Way Rules, 2016' as amended from time to time.
- To identify the issues and challenges in obtaining Right of Way (RoW) permission in a uniform, timely and non-discriminatory manner for establishment of telecommunication infrastructure in the country.
- To suggest remedial measures as way forward to facilitate easier and faster deployment of telecommunications infrastructure.

### **Research Methodology**

- Methodology based on mixed research strategy methods.
- Combination of theoretical and empirical methods.
- Content analysis and field surveys approach will be employed.
- The data sources used in the research are mainly secondary in nature gathered from various:
  - ✓ Academic journals /periodicals/ reports
  - ✓ Policy documents / publications of Government of India
  - ✓ Department of Telecommunications (DoT)
  - ✓ ITU
  - ✓ GSMA
  - ✓ TRAI
  - ✓ TEC

### Questionnaire

The primary data is being collected through a questionnaire from:

- ✓ DoT
- ✓ TRAI
- ✓ Telecom Service Providers (TSPs)
- ✓ Infrastructure Providers
- ✓ Industry
- ✓ Associations etc.

### Survey

#### Interaction and discussions with:

- ✓ DoT
- ✓ TRAI
- ✓ Telecom Service Providers (TSPs)
- ✓ Infrastructure Providers
- ✓ Industry
- ✓ Associations etc.

### **Chapterisation Scheme**

- Chapter I- Introduction
- Chapter II- Literature Review
- Chapter III- 'Indian Telegraph Right of Way Rules, 2016': An Analysis
- Chapter IV- Research Findings
- Chapter V- Recommendations and Conclusion
- Chapter VI- Bibliography
- Chapter VII- Appendices

### **Timelines**

- Response to questionnaire & survey to be completed by 10-02-2023.
- Initial draft of dissertation to be submitted to guide by 28-02-2023
- Final submission by 17-03-2023

## Thank You

Year	Author	Objectives and Issue Discussed			Research Gap
2011	Union (ITU)	'Broadband: a platform for progress'	different stakeholders and study of various international practices	It stated that Governments can streamline and	identified Recommendations were generic in nature and not specific to a country.
2012	Chhaya L. K.	Legislative and Regulatory Issues and Prospects in Indian Telecom Sector			flagged the issue of RoW permissions. Suitable remedial

Year	Author	Objectives and Issue	Research Method	Findings	Research Gap
		Discussed	Adopted		identified
2016	International	It is a white paper on	Study of literature	It stated that significant	The issue of RoW
	Telecommunications	broadband regulation	and consultation with	efforts were required to be	access has been
	Union (ITU)	and policy in Asia-	different stakeholders	directed by Governments to	identified but the
		Pacific region		draft regulatory and legal	remedial measures
				frame-works based on	have not been
				global and regional	suggested.
				exemplars to facilitate	
				efficient broadband	
				deployment . This included,	
				inter alia, enhanced Rights	
				of Way (RoW) access.	
2018	Department of	1 2	Extensive	It provided emphasis on	The methodology to
	Telecommunications		consultation with		create collaborative
	(DoT)	Communication	different stakeholders		mechanism and
		Policy, 2018 outlines		between Centre, States, and	
		a set of goals,			been outlined.
		initiatives, &		Rights of Way,	
		strategies to unlock		standardisation of costs and	
		the transformative		timelines and removal of	
		power of digital		barriers to approvals.	
		communications			
		networks.			

Year	Author	<b>Objectives and Issue</b>	Research Method	Findings	Research Gap
		Discussed	Adopted		identified
2018	International Telecommunications Union (ITU)	The report navigates through the issues related to 5G and identifies the opportunities and challenges in roll out of 5G.		It mentioned that policy makers should agree upon standardized wayleave (Rights of Way) agreements to reduce cost and time to deploy fibre and wireless networks.	The issue of RoW access has been marked but the remedial measures have not been suggested.
2019	Telecom Regulatory Authority of India (TRAI)	The white paper highlights the specifications of the 5G technology, potential use cases, architecture of 5G, spectrum requirements ,and tries to identify regulatory challenges that need to be addressed for the deployment of 5G in India.	Consultation with different stakeholders	It recommended that keeping with the requirements of small cell deployment, suitable amendment in the RoW rules would be beneficial.	The details of amendments required in RoW rules have not been suggested.

Year	Author	Objectives and Issue Discussed	Research Method Adopted	Findings	Research Gap identified
2020	International Telecommunications Union (ITU)	The report reflects on progress made in	Study of literature	It mentioned that policy recommendations presented by the Commission over the past decade to be leveraged and effected in the decade of action included improvement in Right of Way regulations.	The issue of RoW
2020	GSMA	The GSMA report analyses the specific RoW challenges faced by Indian telecom operators.		It recommended a slew of measures to accelerate the Right of Way (RoW) for quicker deployment of broadband infrastructure in the country including single window clearance, uniform implementation of the RoW Rules 2016 by all States, structured aerial fiber in dense urban environments etc.	

Year	Author	<b>Objectives and Issue</b>	Research Method	Findings	Research Gap
		Discussed	Adopted		identified
2021	Telecom Regulatory Authority of India (TRAI)	Recommendations by TRAI regarding Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed.	Study of literature and consultation with stakeholders.	inefficiencies regarding Right of Way (RoW) permissions, the Central Government should come	The recommendations were focussed on entire ecosystem for promotion of broadband and enhanced broadband speed.
2022	Telecom Engineering Centre (TEC)		different stakeholders		The report is focussed only on the aspects of small cell.

### **Research Questions**

- What are the 'Indian Telegraph Right of Way Rules, 2016' as amended from time to time?
- What are the issues and challenges in obtaining Right of Way (RoW) permission in a uniform, timely and non-discriminatory manner for establishment of telecommunication infrastructure in the country?
- What are the possible remedial measures to facilitate easier and faster deployment of telecommunications infrastructure?

### **Rationale and Justification**

- Timely and affordable RoW permissions from authorities for establishment of telecommunications infrastructure is essential for improvement and expansion of telecom services
- Union Government notified the 'Indian Telegraph Right of Way Rules, 2016' on 15<sup>th</sup> November, 2016
- Problems in getting Right of Way permissions still aplenty
- Telecommunications -Central subject; permissions mostly granted by the respective States / local bodies.
- Availability of academic literature on assessment of 'Indian Telegraph Right of Way Rules, 2016' is almost nonexistent.
- Roll out of 5G clearly visible over the horizon-street furniture RoW
- Pressing need to analyse the present scenario pertaining to RoW for the Indian telecom sector, identify the issues and challenges, and suggest remedial measures.

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