



रेलटेल
RAILTEL

RailTel Presentation

By:

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Agenda

- Introduction
- Infrastructure & Services
- National Projects
- Infrastructure Augmentation
- New Projects & Services

Introduction

- RailTel is a leading Telecom Service Provider (TSP) CPSU under Ministry of Railways.
- In May, 2012 RailTel has been conferred the status of **Mini-Ratna (Category-1)**
- Exclusive Right of Way (RoW) along 63000 RKM connecting over 7000 stations.
- 5th largest telecom infrastructure provider in India and largest neutral player – Carrier to Carrier

Vision & Objectives

- **Vision**

“To become the preferred telecom solution and services provider for knowledge economy.”

- **Mission**

“To attain leadership in providing premier telecom infrastructure service by offering cost effective state-of-the-art communication solutions.”

- **Objectives**

- To facilitate Rlys in expeditious modernizing of train operation & safety systems and network providing by state of art commn infra. (Control and Command)
- To plan, built, develop, operate and maintain a nationwide broadband telecom and multimedia network to supplement national telecom infrastructure to spur growth of telecom, broadband and IT enabled value added services in all parts of country specially rural, remote and backward areas.
- To generate revenue through commercial exploitation of its telecom network.

Organizational Structure

CORPORATE OFFICE (GURGAON)

**Eastern Region
(Kolkata)**

Territories

- Guwahati
- Patna
- Bhubneshwar
- Kolkata
- Raipur

**Northern Region
(New Delhi)**

Territories

- Chandigarh
- Lucknow
- Jaipur
- New Delhi

**Southern Region
(Secunderabad)**

Territories

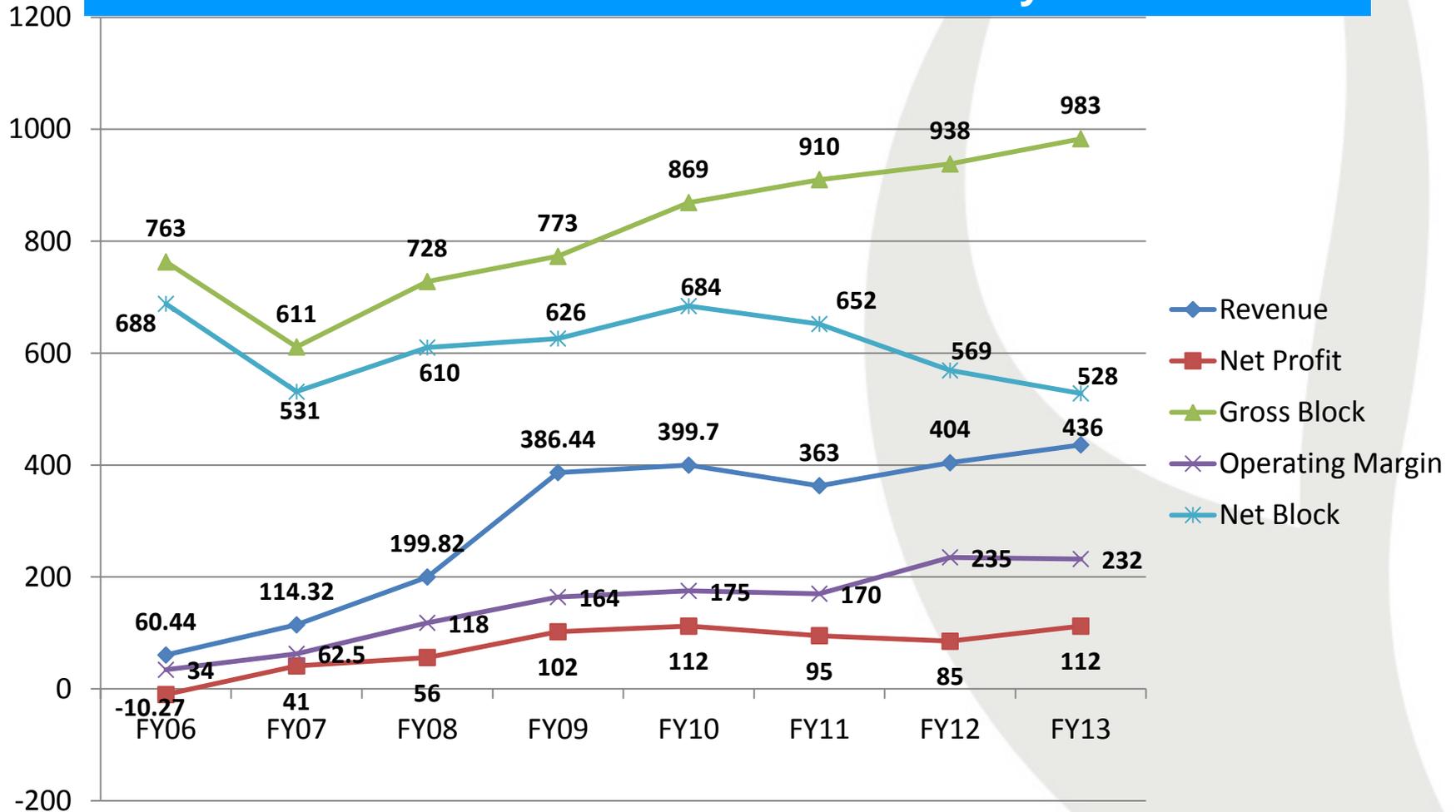
- Chennai
- Bangalore
- Cochin
- Hyderabad

**Western Region
(Mumbai)**

Territories

- Ahmedabad
- Bhopal
- Pune
- Mumbai

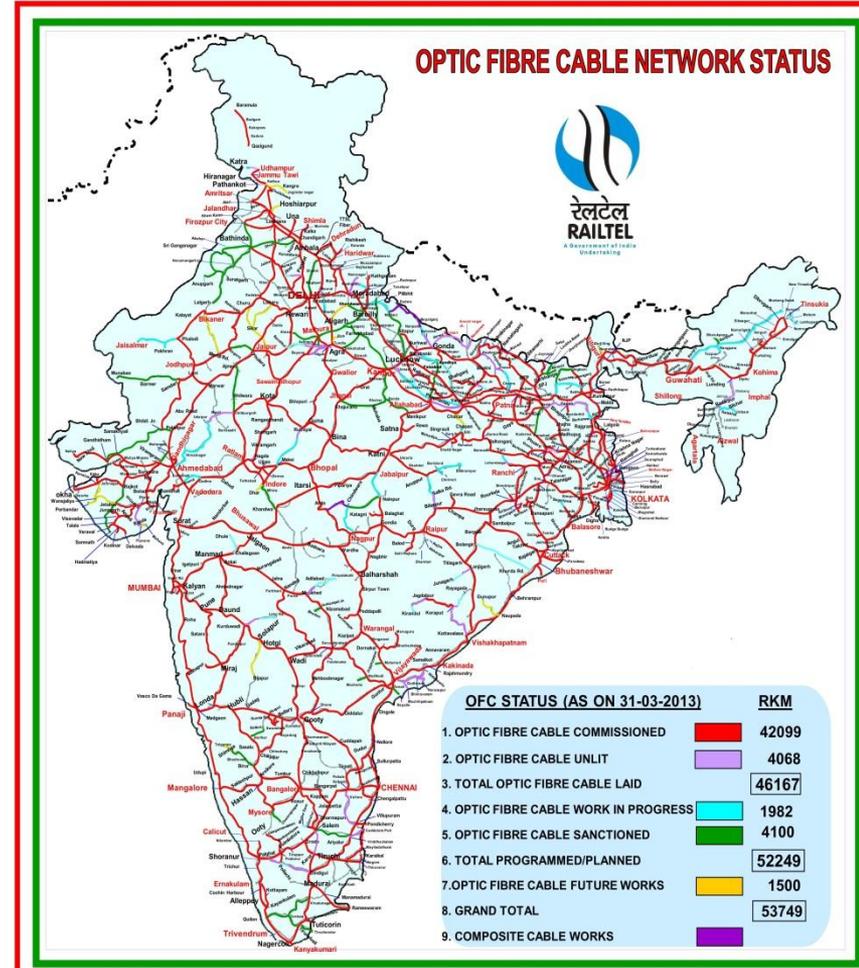
RailTel – Revenue & Profit Growth over the years



Infrastructure & Services

PRESENT NETWORK

- OFC Network – 42,000 RKM
- Points of Presence – 4200+ stations
- DWDM Network (10,500 RKM & 31 cities)
- STM-64/16 Network (600+cities)
- MPLS & NGN Network (40 cities Core)
- Network Operating Center (4 cities)
- Total network mapped on GIS



Infrastructure & Services – Service Portfolio



RailTel – Major Customers



INDIAN ARMY



DRDO



RBI



SBI



बैंक ऑफ बड़ौदा
Bank of Baroda



IGNOU



Services to Railways

- Nation-wide Railway backbone network with STM-4 (600 Mbps) capacity.
- MPLS Data Network for UTS, FOIS, AFRES, COIS, etc.
- MPLS VPN for Railnet aggregated to over 1.5G capacity
- Internet Bandwidth aggregated to over 1.2G capacity
- Managing Mobile CUG connection for 1.75 Lac employees.
- NLD for Railway exchanges on RailTel's NGN handling over 3.5 million MoU per month.
- DSLAMs for Broadband at Railway colonies.

Recognition to RailTel



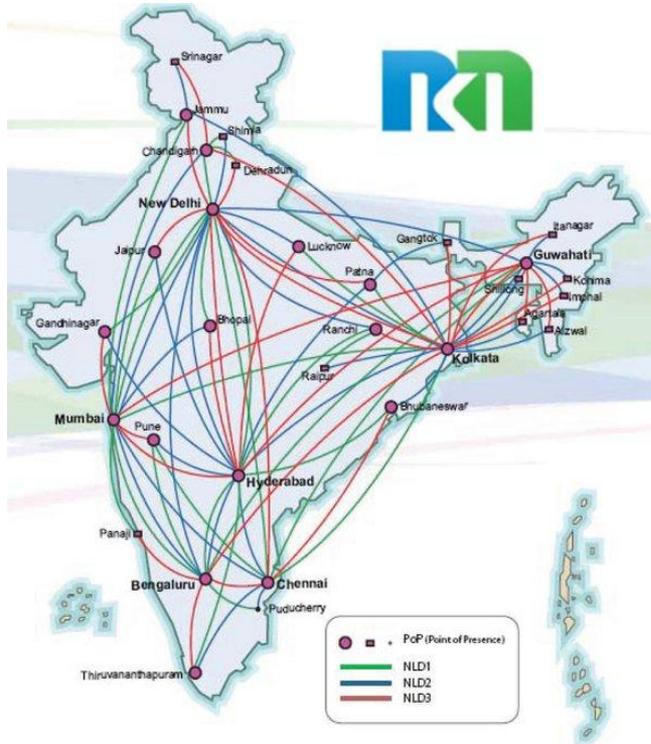
- **“MoU Excellence Award” by SCOPE/DPE in 2010**
- **“Best Carrier of Carrier Award” by VAR India in 2010**
- **“Excellence in Innovative Telecom Services” by CMAI in 2010**
- **“Emerging Telecom Infrastructure Provider” by CMAI in 2011**
- **“Best Carrier of Carrier” by VAR India in 2012**
- **Aegis Graham Bell Award for “Innovation in Telecom Infrastructure” in 2012**
- **RailTel’s CMD Sh. R.K Bahuguna recognised as “T20 of Indian Telecom” in 2012 by Aegis Graham Bell Awards.**

RailTel receiving “Economic Times Telecom Awards” in 2013 for “Best Trusted Carrier” & “Best Social Initiative”



**National Projects
undertaken
by RailTel**

National Knowledge Network

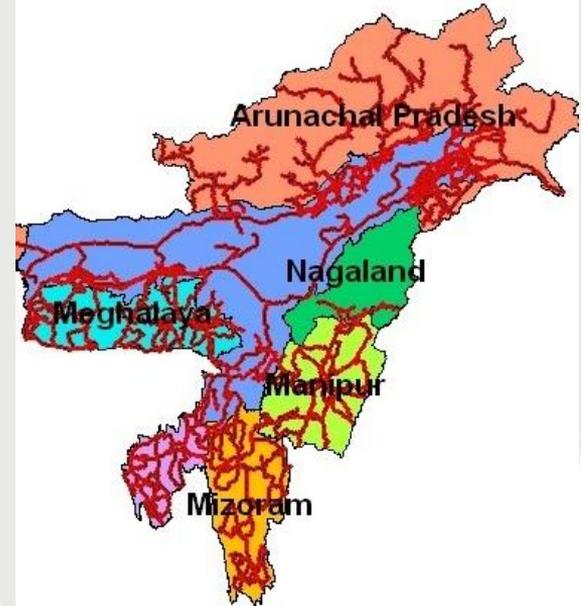


Multiple 2.5/10 G Connecting all the State Capitals & Gigabit Connectivity to all the Districts

- Lead Creator of NKN
- No of links:
 - 89 Core links (10G each),
 - 600 Distribution links (2.5G each)
 - 1500 institutions (1G/100M)
- Implementation by NIC, BSNL, RailTel & PGCIL
- RailTel's Scope: 26 Core, 128 distribution & 343 access links
- Implemented: 26 core, 90 distribution & 320 access links
- Over 2400 KM of access network being laid across India.

USOF Project of North-East

- RailTel bagged the prestigious project for laying of OFC in NE-I (Mizoram, Tripura, Meghalaya) & NE-II (Arunachal Pradesh, Manipur & Nagaland) connecting all DHQs and SDHQs on OFC based STM-16/64 network totaling 600 locations within 2 years.
- RailTel took up project as a business strategy to serve this unserved area and have first mover advantage.
- Shall not result into immediate revenues except that it shall create platform for future business
- Survey of all States completed. Laying for 12300 KM to be completed by Mar'15.



- **Total Project Subsidy =Rs. 388 Cr.**
- **Total Project cost = Rs. 450 Cr.**

National Optic Fiber Network

- Govt. of India approved project in Oct 2011 to connect 2.5 lakh panchayats on optic fiber network within 2 years.
- Pilot done in Panisagar successfully.
- 124 districts (11 states) given to RailTel worth Rs. 2500 Crs.
- Survey work completed, execution started and likely to be completed within 2 yrs.
- Execution & Fiber Leasing Agreement signed with BBNL.

**Initiatives on
Infrastructure Augmentation &
New Services**

Action Plan - Strategic Diversification

Sector focus

Railways

Govt.
Ministries

Enterprises

MSOs

National/
International
projects

Communi-
cation
Based
Signalling

Surv
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Unified
Communi-
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Integr
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Securi-
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Data
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SP
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Cloud
Servic
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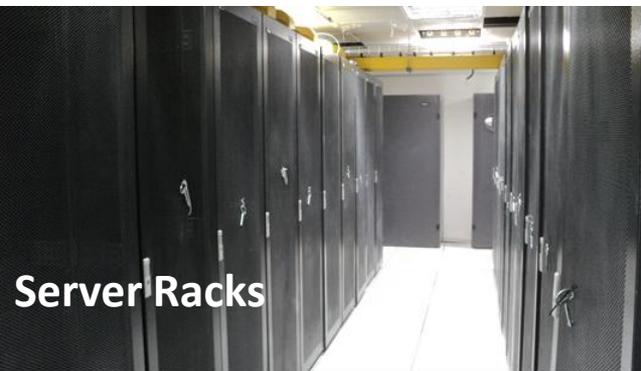
CDN

Tele
Prese
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Rail
wire

Telec
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Infra
Proje
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Secunderabad Data Center (Tier-III Certified)



- **Uptime USA Design Tier-III Certification Obtained**
- **8th Data Center in India to be Tier-III certified**

Services:

- Co-location Hosting
- Managed Services
- Cloud computing Services
- Disaster Recovery Sites
- Other related services
- Internal use (ERP)



Next Coming at Gurgaon

- Location - RailTel own building
- Completion – Mar 2014

Central NOC & Regional Office at Shastri Park



- Central SDH NOC
- Central MPLS NOC



- PAN India Billing centre
- NGN NOC
- IP DSLAM NOC

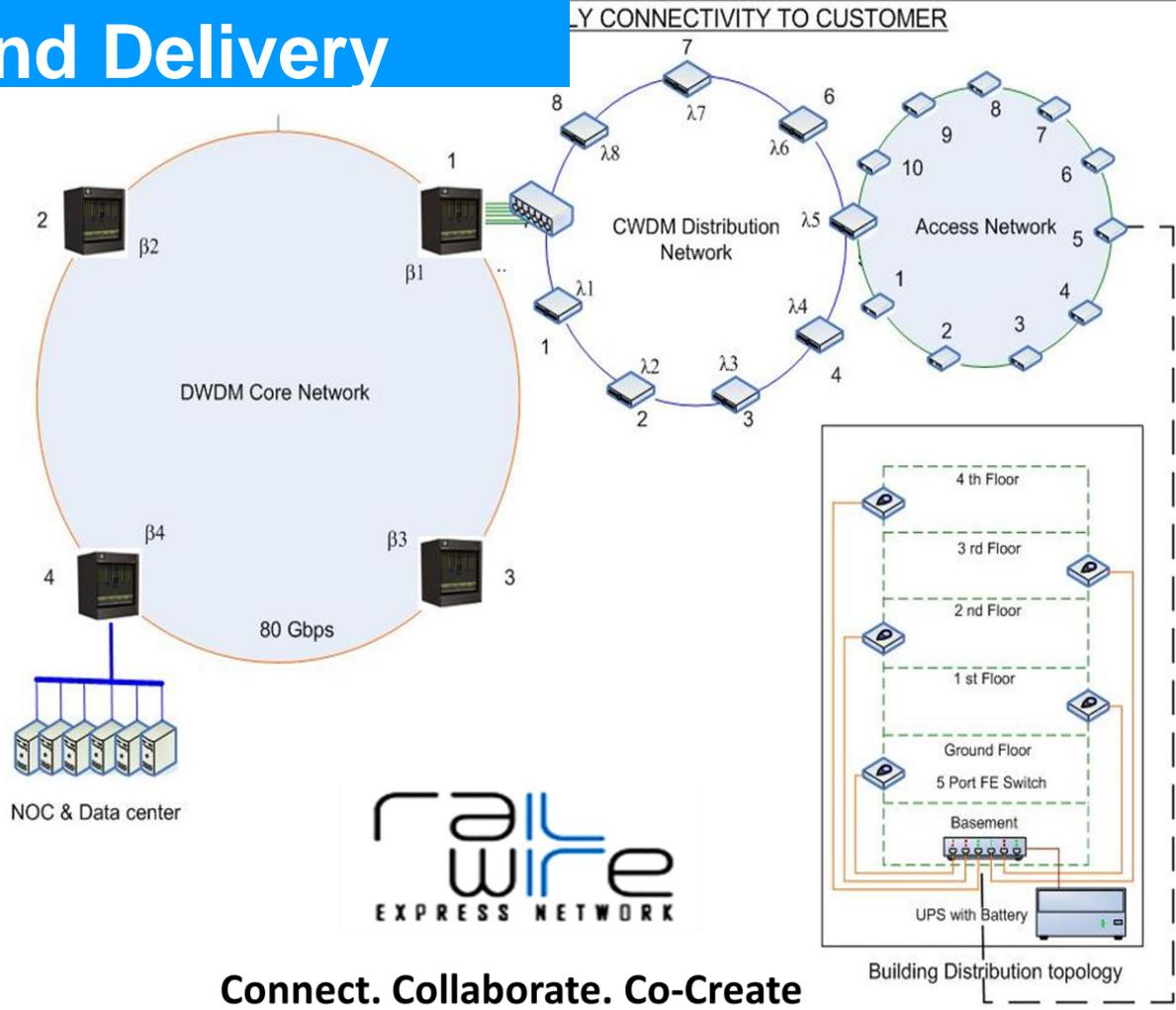


RailTel – Capacity Expansion

- CORE being migrated on DWDM covering 24000 RKM – making it 400G network.
- DXC on important junctions
- STM-16/64 across 140 locations
- Access network in 300+ cities
- MPLS Core upgradation upto 10G covering 37 locations and 100 access nodes upto 1G.
- Central NOC being created at Shastri Park
- 2nd Data Center being created at Gurgaon

Railwire – Broadband Delivery

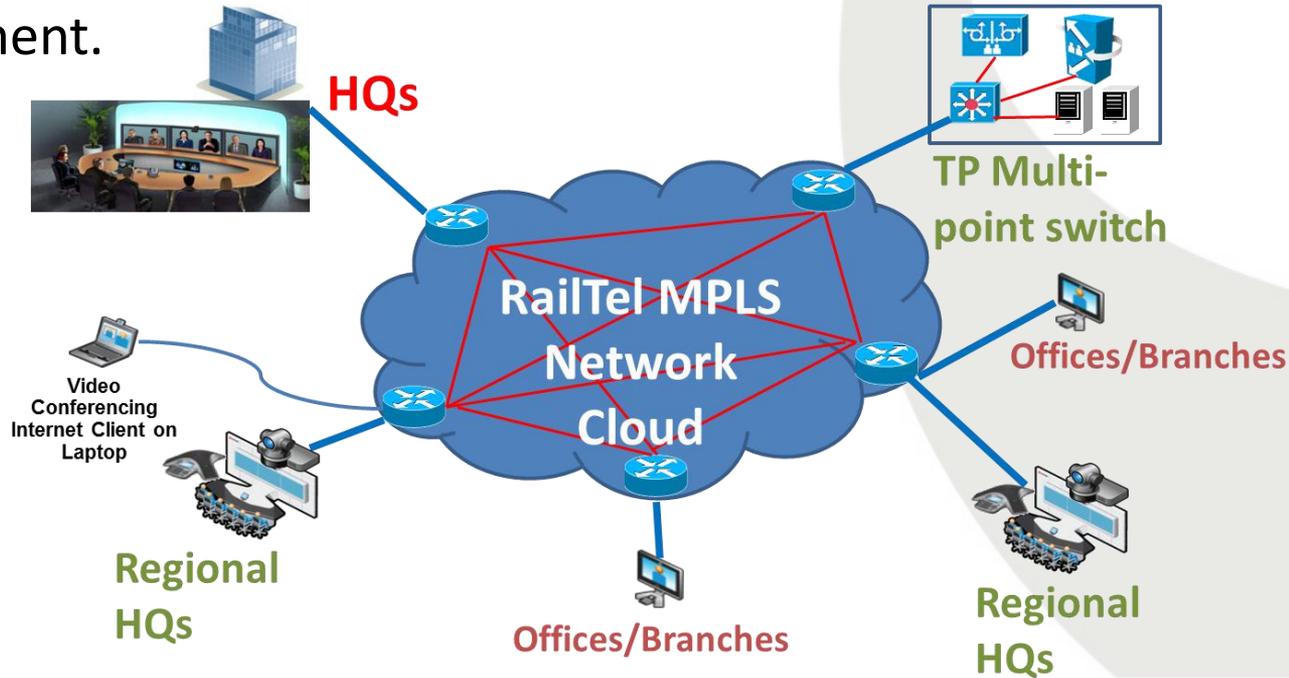
- Launched across India
- Broadband to the Common Man.
- Citizen Centric Services.
- Open to 3rd party applications.
- Health, Education, Work@Home applications.
- Ready for IPTV, VoD.
- Ready For Web 2.0, HD Video(25Mbps).
- 5000 Railwire subscribers in the States of Karnataka, Tamil Nadu & Kerala.



Connect. Collaborate. Co-Create

Tele-presence as a Service (TPaaS)

- Launch **Tele-presence** as a service.
- TP is a HD based Video conferencing facility.
- Ideal for meetings across Time zones, e-learning facility, R&D centers.
- Also help in monetizing the MPLS network due to high capacity requirement.



International/Signaling Projects

- Won prestigious international SASEC Project of Bhutan for building up data network worth approx. Rs. 8 Crs.
- RailTel is also L1 in Bangladesh for creating data network for education grid (similar to NKN). Expected Project cost – Rs. 90 Cr.
- Efforts are being made to coordinate with World Bank for various international projects in Central & South Asian countries (dialogue with Afghanistan & Uzbekistan already initiated).
- RailTel is also participating in Signaling project of various Indian Rly organisation & Metro. Similar projects to be taken up in international market.

R&D Efforts

- 8th TCOE (Telecom Center of Excellence) named RICET approved by DoT to be setup by RailTel in partnership with IIT/Roorkee in the field of “Broadband & IT Applications”. To develop IPR for broadband specific applications & services which shall help RailTel in longer run.
- MoU signed on 5th Jun’13 in the presence of MoC&IT.
- RailTel has also taken up to be the member of TSSC (Telecom Sector Skill Council in partnership with NSDC) helping Govt. mission to create over 50 mlln. expert pool of talent in telecom domain.

CSR Initiative

- In 2012-13, provided IT infrastructure at 36 locations in 20 Panchayats in 6 states at a cost of Rs 2.6 Crs
- IT setup provided with computers, VC, LCD, Power back-up with Solar panel & Internet.
- During 13-14, skill development initiatives to be taken up in rural areas.



Thank you

Lets stride together towards greater heights.



Batasia Loop of Darjeeling Himalayan Railways – A Heritage Railway under UNESCO