

BSNL

Connecting India

CFA Services and Plan - 2018-19

Head of Circle Conference 10-11 May 2018

Vision

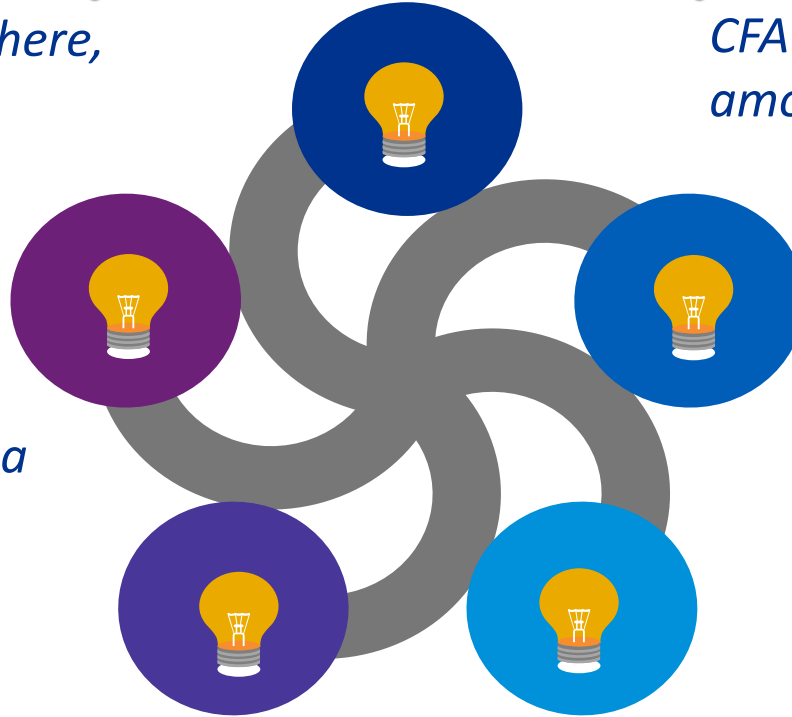
*Connecting everywhere,
every person with
broadband*

*CFA to contribute substantial
amount of revenue to BSNL*

*Ensuring that every home in a
country should have a voice
connectivity*

*To provide state of art
technology & application in
voice and data*

*To provide nearly fault free voice
& data services*

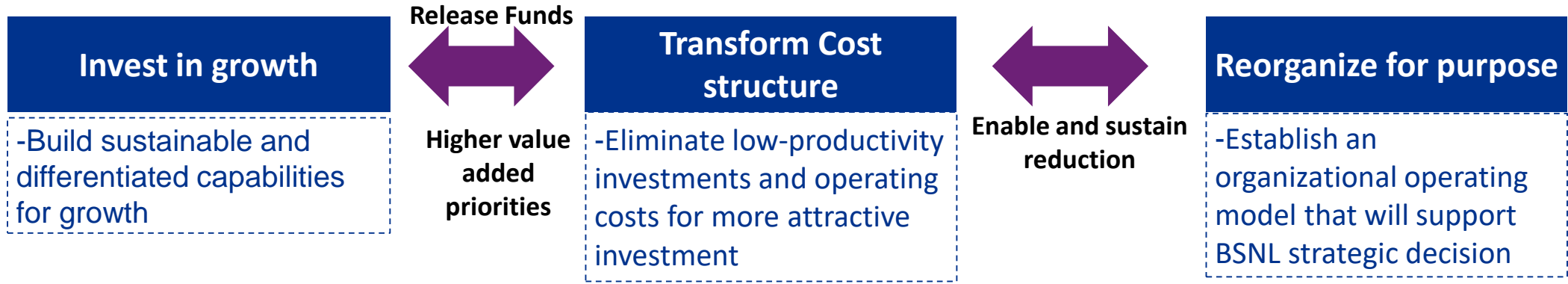


Objective

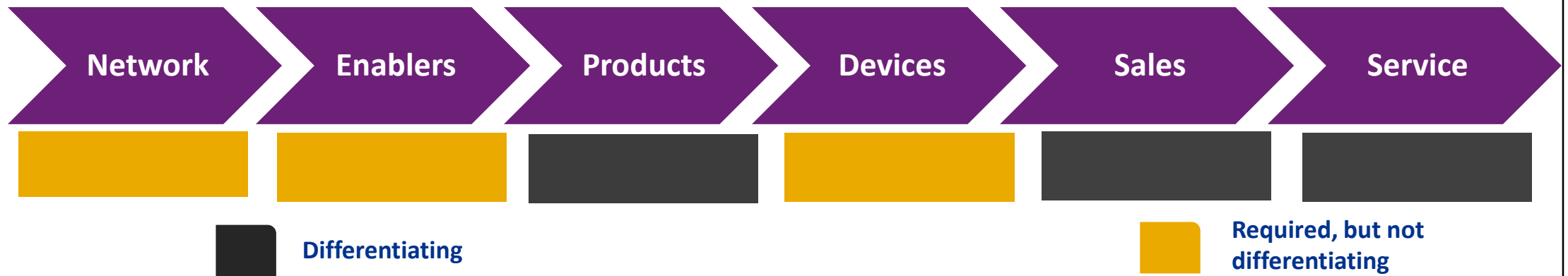
1	Connecting all unconnected homes with voice by 2019
2	Providing broadband on demand with 50 Mbps by 2020
3	Achieving less than 3% fault rate by Decemeber,2019
4	CFA should be able to manage its own salary and investment with its own internal resources by 2020
5	Be one of the leading player in smart city development in the country
6	Providing value added services especially in areas of education, health, entertainment and agriculture
7	Achieving 20% YOY revenue growth in CFA segment

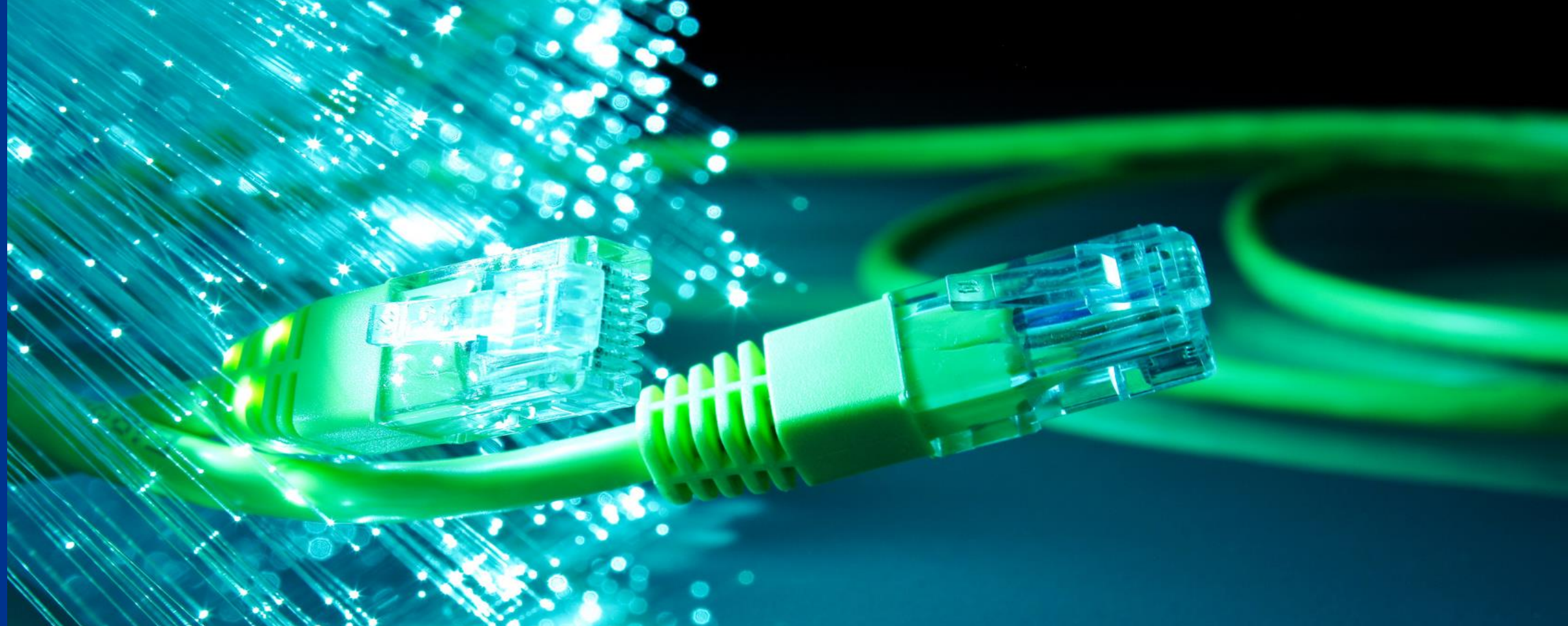
Framework

Growth, Cost & Transformation



BSNL Value chain



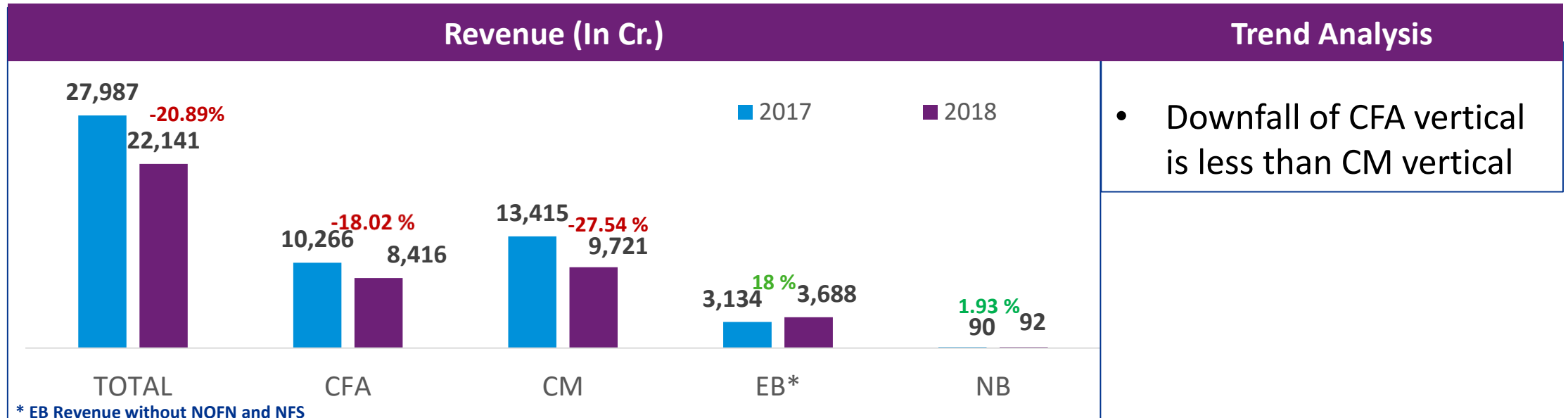


CFA Finance



Finance: Vertical-wise Revenue (ABF) overview for the year 2017-18 vs. 2016-17

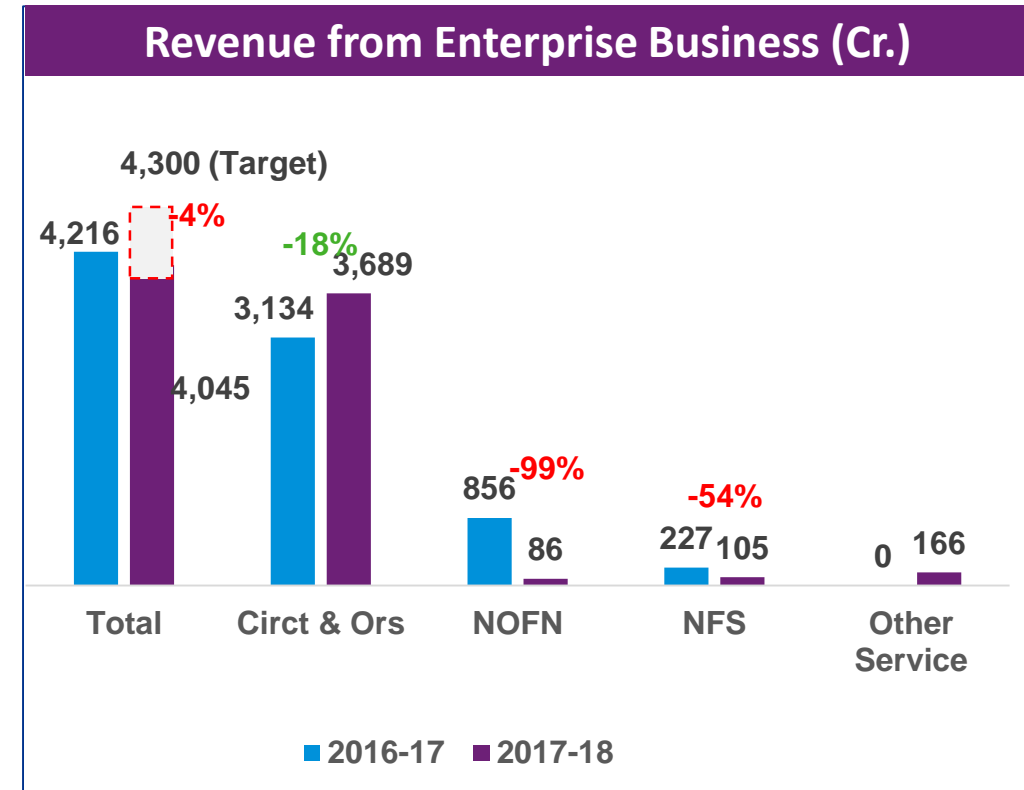
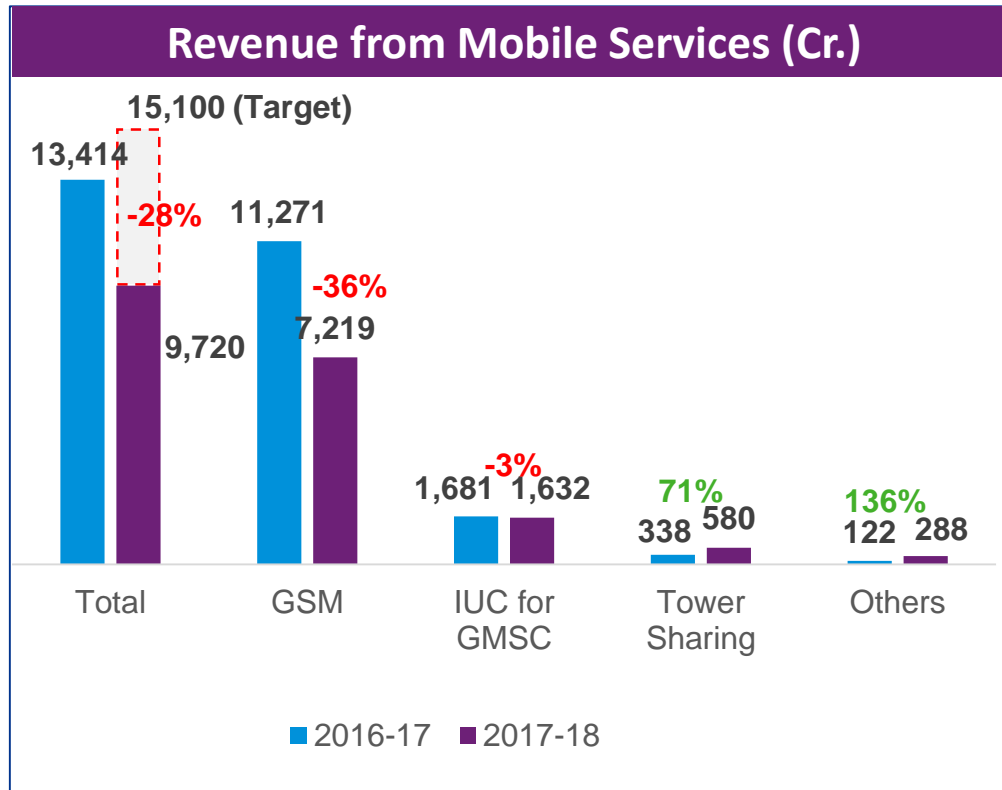
BSNL Situation



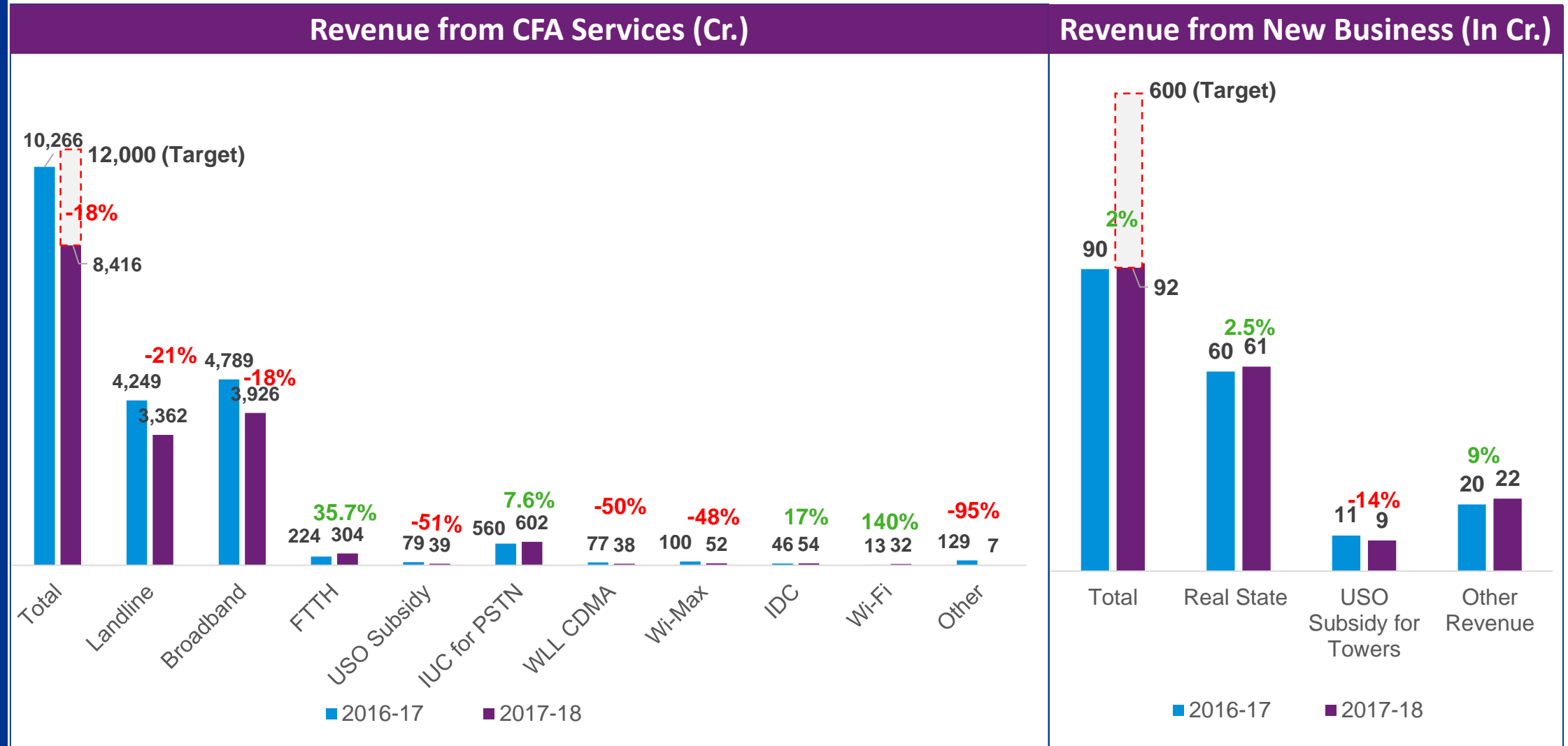
Industry Trends

- As per Crisil report 40% decline is expected in Indian Telecom Industry
- Heightened competition and pricing pressures leading to decline the telecom industry's revenue
- Trend of Fixed Charging for all sort of services instead of usage based Charging
- The situation to remain same during this year as well, as the pricing pressures show no signs of slowdown

Finance: Vertical-wise & Service/Component-wise Revenue (1/2)

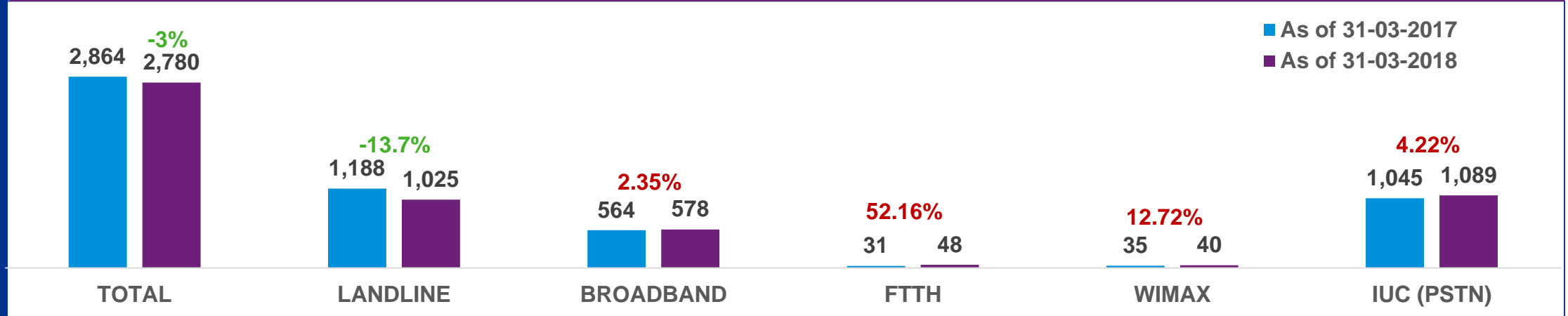


Finance: Vertical-wise & Service/Component-wise Revenue (2/2)

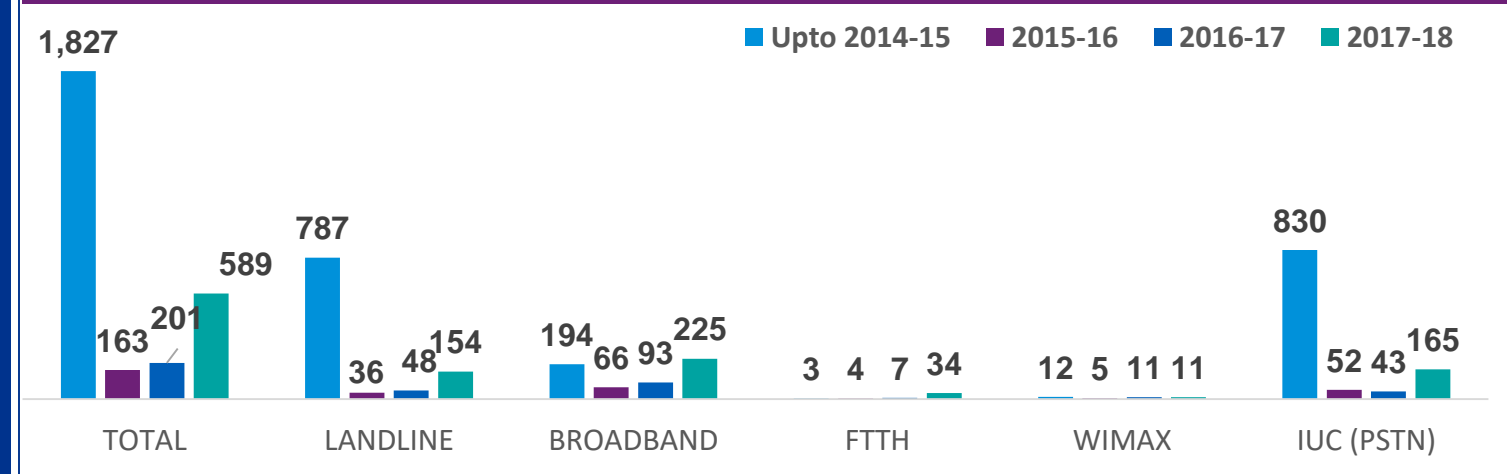


Finance: Service-wise & age-wise outstanding in CFA

Service Wise Outstanding (Cr.)



Age Wise Outstanding (Cr.)

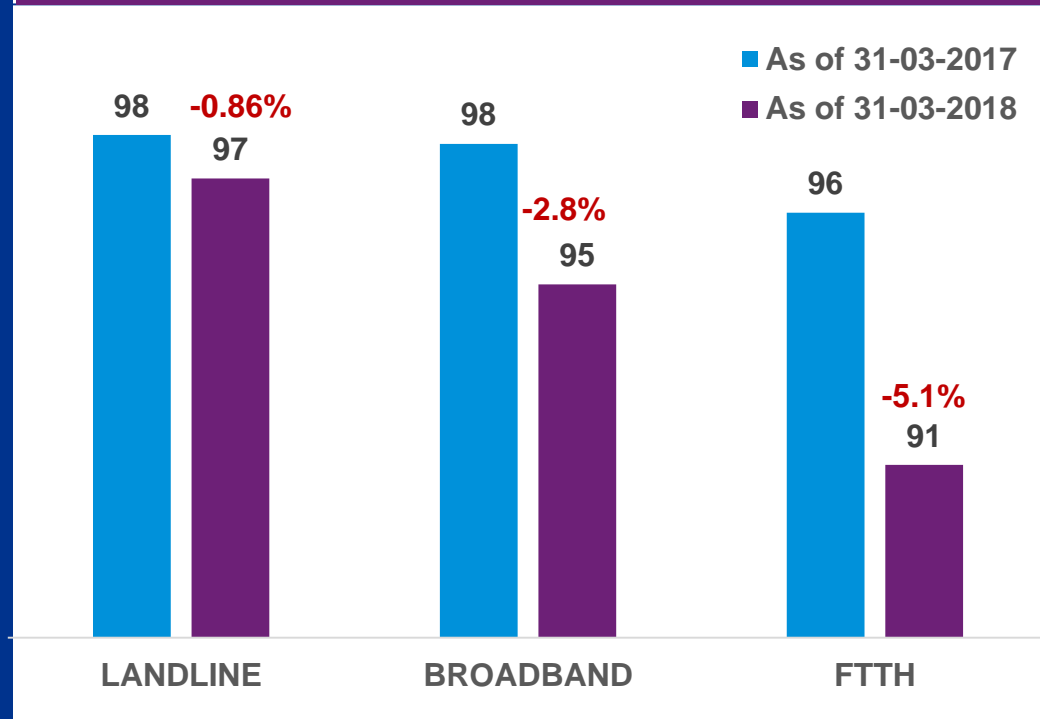


Trend Analysis

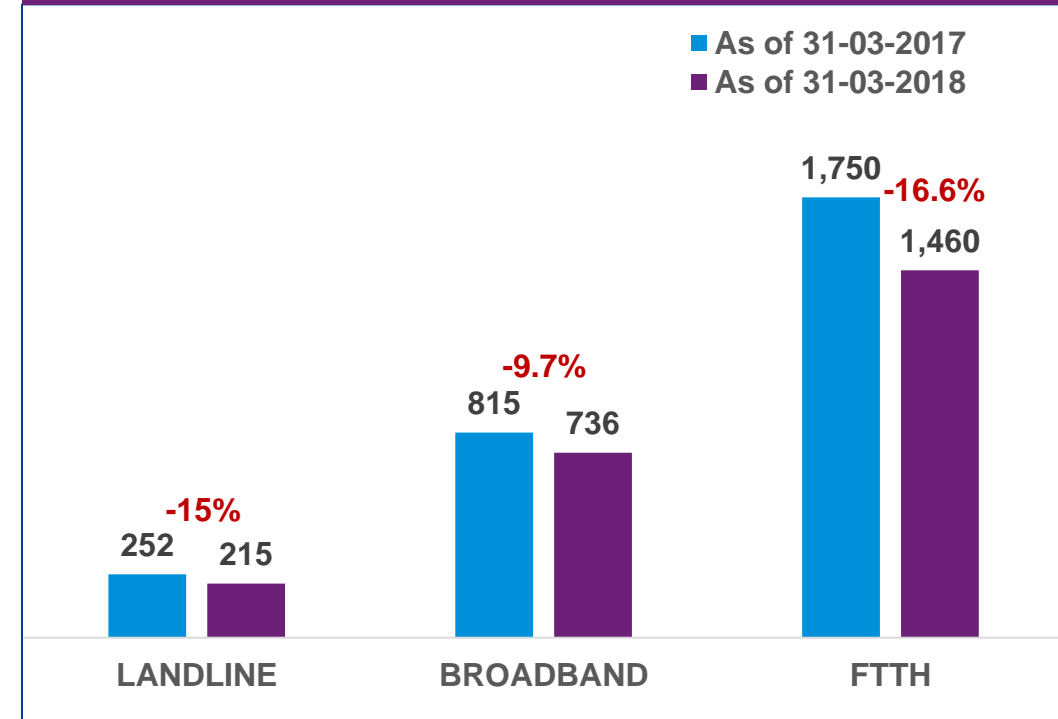
- Landline outstanding has been reduced due to special effort like 'Project Aishwarya'.
- IUC outstanding increased due to billing disputes raised by TSPs.

Finance: Collection Efficiency & ARPU

6th Month Collection Efficiency (%)



ARPU (INR)



Trend Analysis

- High revenue earning services i.e. FTTH shows maximum fall in 6th month Collection Efficiency and ARPU.

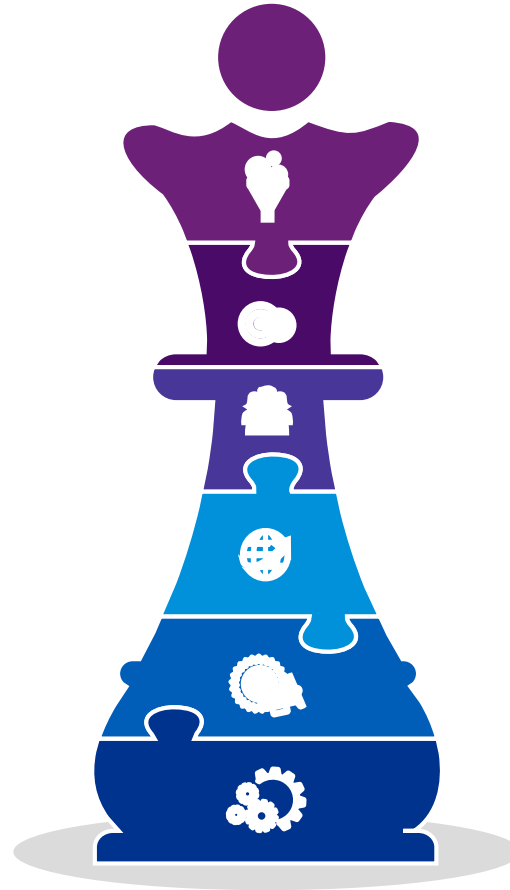
Finance - Strategy

Minimizing disconnection

Maximizing Collection and achieving targets under 'Project Aishwarya'

Reducing Printing and delivery costs through Go-green initiative

Ensuring 100% billing & Revenue recording under correct heads and Monitoring Fraud Management System

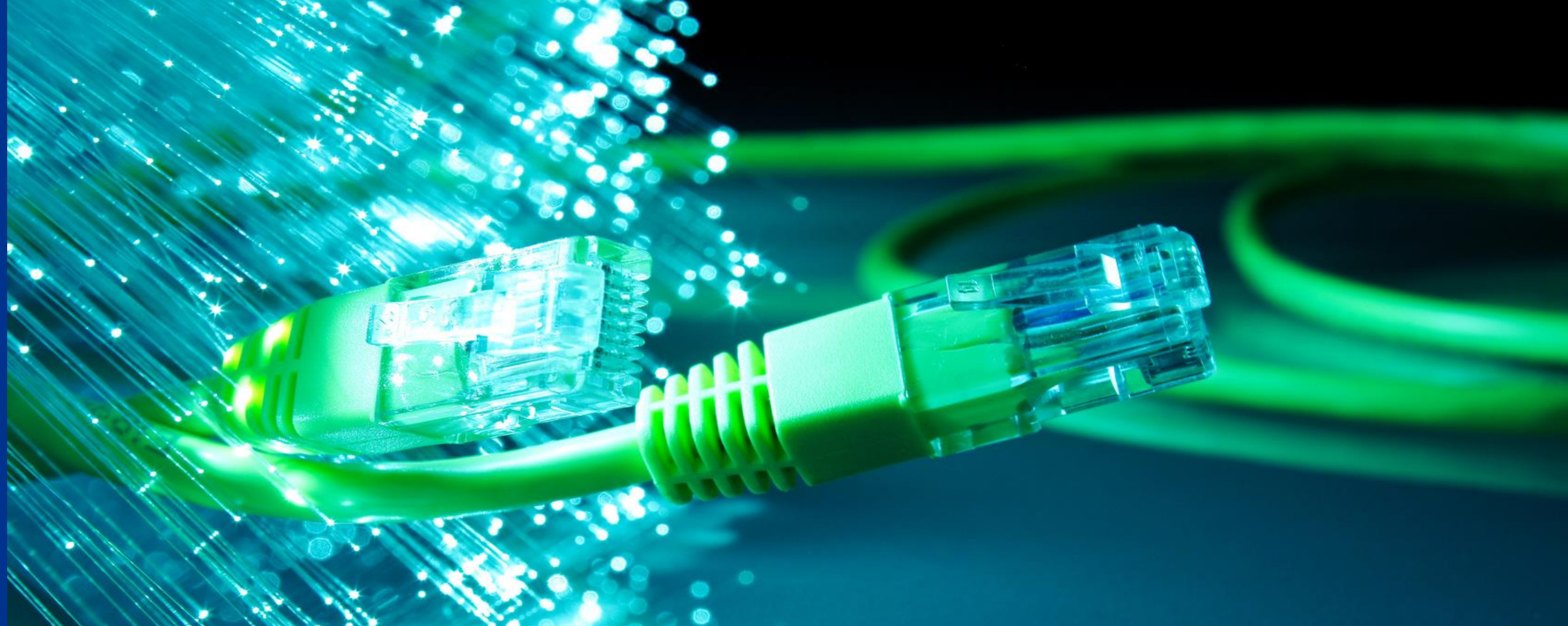


Dynamic Updation of on-line payments

Settlement of payment for Business Partners

Implementation of Web-based Flash Figure and Sub-ledger Reports

Timely Settlement of Refund cases



NWP - Broadband

NWP-BB Unit / IT CFA Unit

KRA

1

Tariff formation and optimization

2

Broadband: Strategic Planning

3

Wi-Fi: Strategic Planning

5

FTTH: Strategic Planning

4

IT- CFA / IT- CDR projects

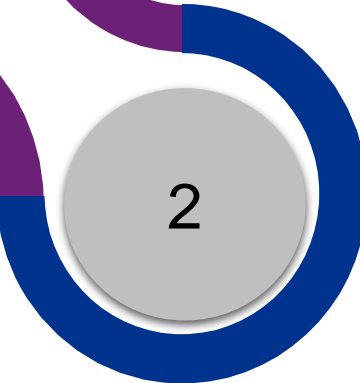


Achievements for the Year 2017-18 :Highlights

ORISSA,
Achieved 35% of BB,
133% of FTTH Targets with one of
the best revenue generating Circle



AP and Telangana,
Progressive number of
New RWA Connections
Revenue Generation
Satisfactory



Karnataka
Maintained Revenue

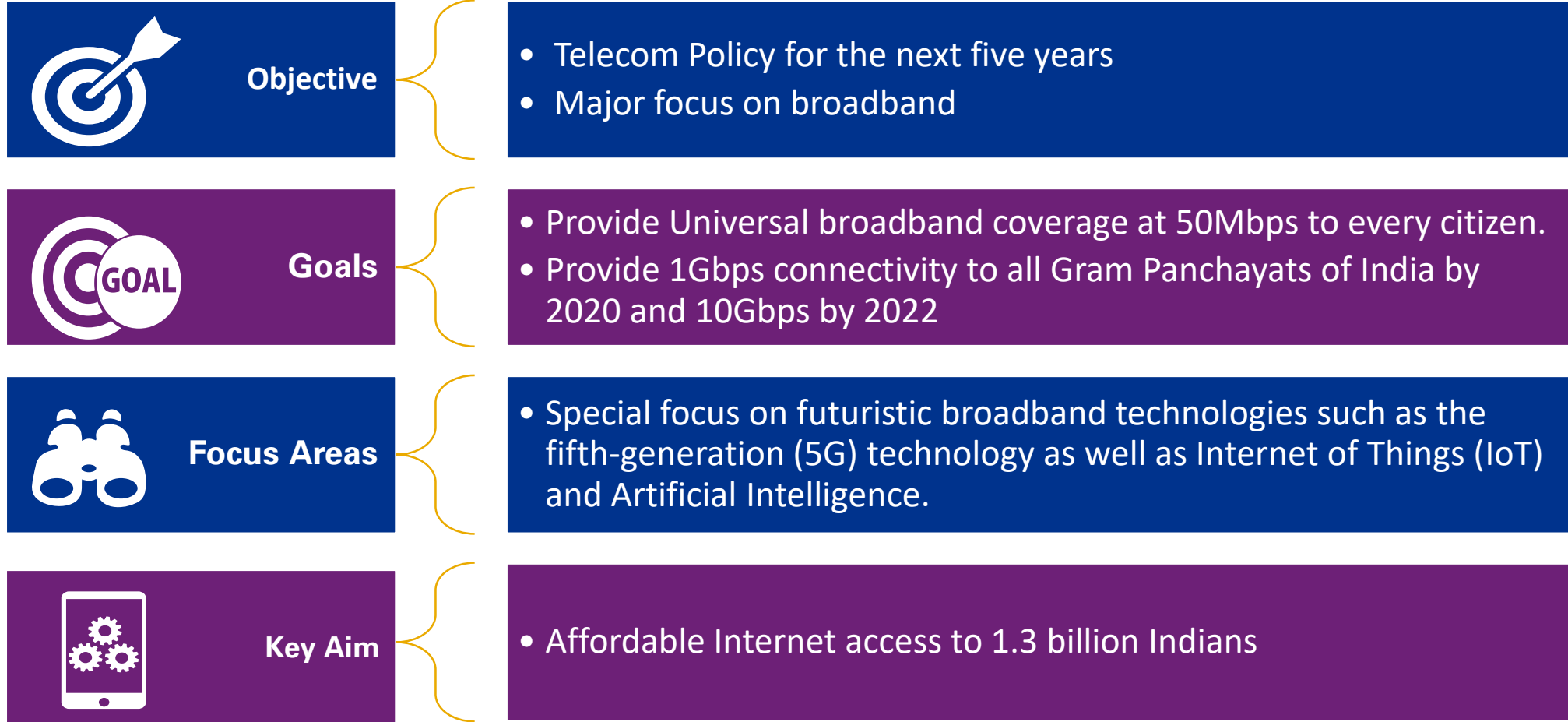


Gujarat, Kerala, A&N
achieved maximum BB
Target.

PAN India Targets	
Broadband Targets	12,00,000
FTTH Targets	5,00,000
Re-location of DSLAMsADSL2+ Ports	2,00,200
Re-location of DSLAMs VDSL Ports	26,800
25 K WiFi Tender	20,166
Indoor APs in MDO Project	9,194

NWP - BB

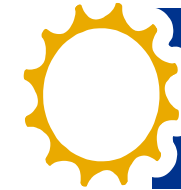
Draft National Digital Communications Policy - 2018 | Key Takeaways



New Projects

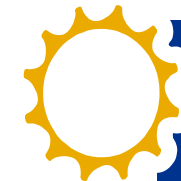
MSAN Tender	Tender for Supply, I&C, O&M of MSAN supporting VDSL2 vectoring (0.6 Mn port) and GPON technology is under process and to be finalize in next 6 months.
CPE Procurement	Targeted to be floated shortly and finalize within 4 months.
MNG PAN Project	708 switches has already been deployed. Additional Order for 702 MNG switches has also been placed and under execution and targeted to be completed by Nov'18.
25K Tender	Tender for setting up of 25000 public WiFi hotspots at BSNL's Telephone Exchanges in rural areas for which PO to be placed in this week.
BNG Tender	APO for Supply, I&C, O&M of BNG and associated subscriber Policy Manager & Authentication platform (RPOP) has already been placed to M/s ITI and PO will be placed shortly
CGNAT Tender	It ensure extension of IPv4 and working of IPV4 & IPV6 concurrently as running out of addresses in their current format, IPv4 and APO being placed in this week.

Strategic Recommendations



Move closer to the customer-
Deploying access equipment
within 2 kms

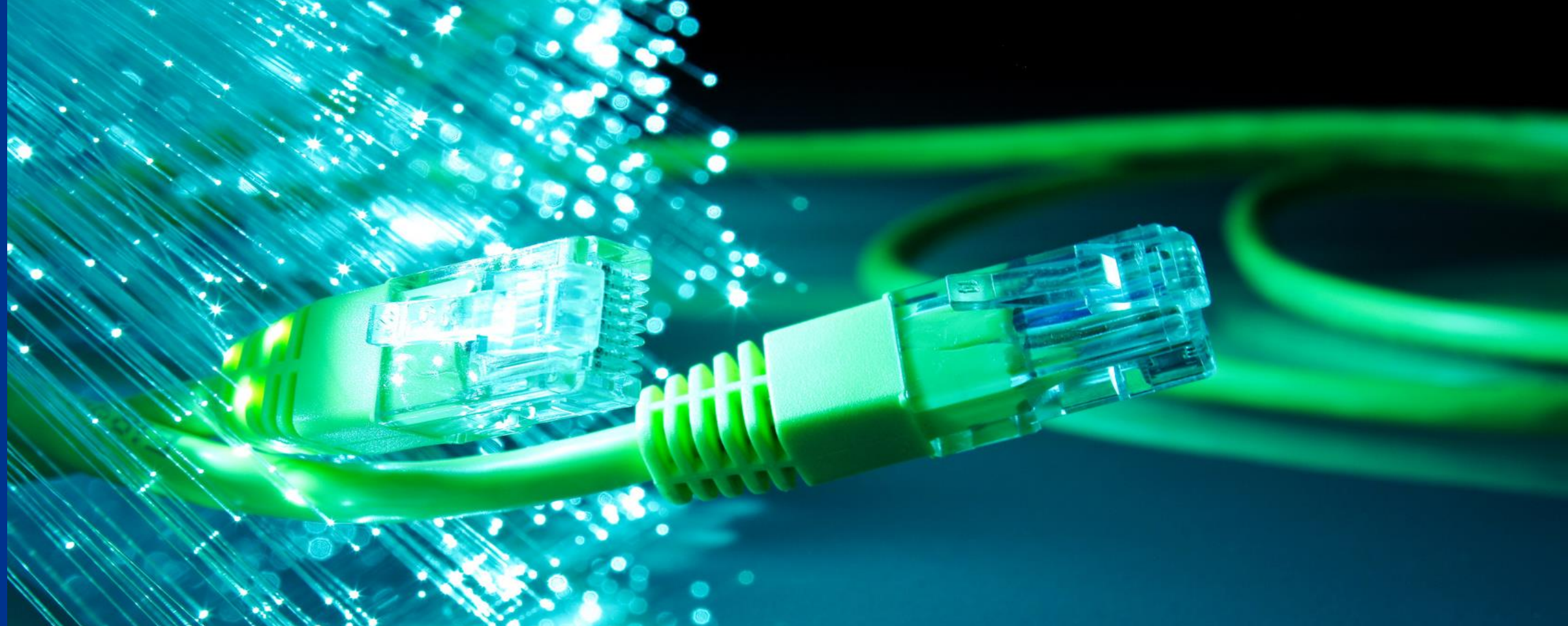
Brand Marketing: Active presence
among customer through social
media (twitter)



Meticulous store planning

Payments-Timely payments
to vendors





WI-FI















BSNL Wi-Fi Hotspots

283% Physical Growth
(5500 in 16-17 to 15,577 in 17-18)

74% Revenue Growth
(50 Cr. in 16-17 to 87 Cr. in 17-18)

21,682 Working Wi-Fi Hotspots

Current Situation (As on Date)

	South & West Zone	North Zone	East Zone
Revenue Share Model	 8334 Hotspots	 1524 Hotspots	 388 Hotspots
MDO Model	 5899 Hotspots	 1115 Hotspots	 952 Hotspots
USOF Model - Existing	 1343 Hotspots	 1589 Hotspots	 504 Hotspots
USOF Model - New	 (Except Guj)	 Except RJ & PB	 Guj, RJ & PB (A Government of India Undertaking)

WIFI

BSNLWI-FI

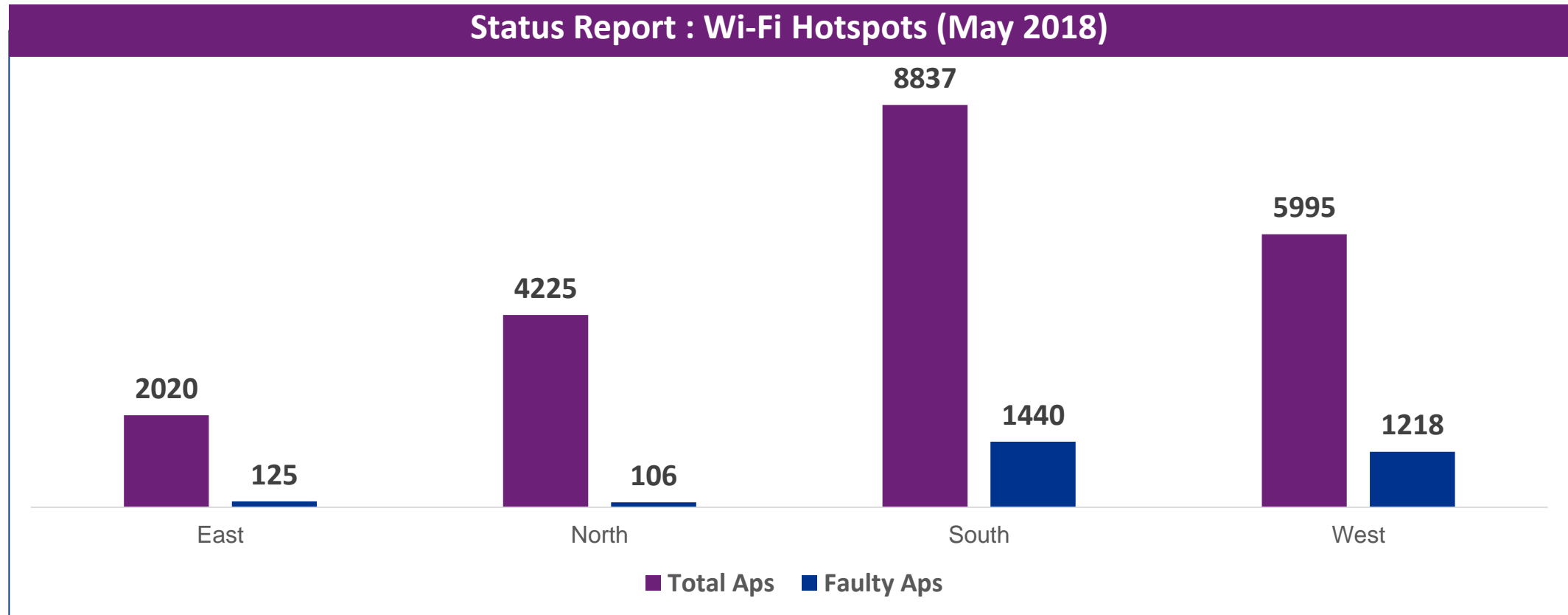
Achievements (2017-18)

KTK, MH, KRL Business: 60 Cr. 3200 Wi-Fi Hotspots	JKD Circle Business: 17 Cr. 752 LWE Locations Wi-Fi	25K Wi Fi Hotspots Capex 495 Cr, Opex 152 Cr/year	MDO Project Achievement in 17-18 7966
HR Circle Business: 5 Cr.	80 Tourist Locations Business: 5 Cr./Year	4000+ Hotspots in 2017-18 USO	Revenue Share Proj. in 2017 -18: 4695

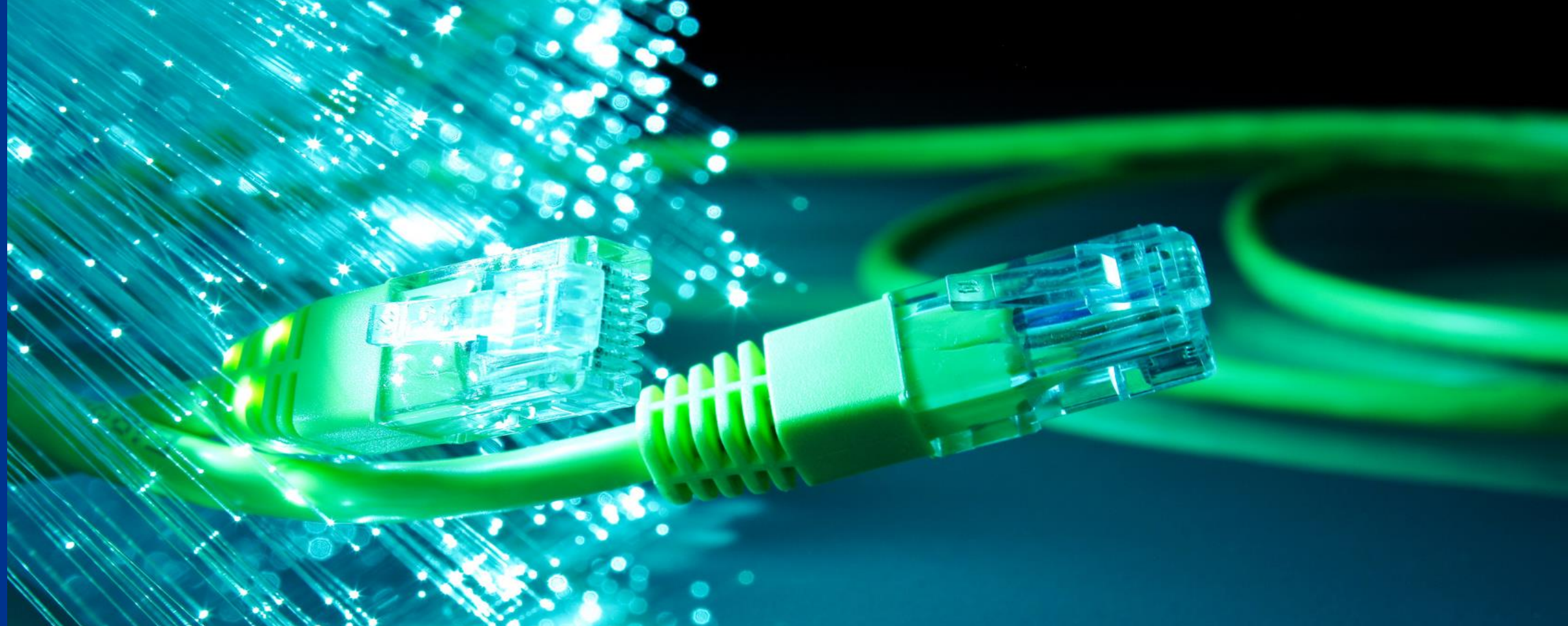
2018-19 Target

Physical Targets for 2018-19	Financial targets 2018-19	For USOF Project	For MDO Project	For Revenue Share Project
<ul style="list-style-type: none"> • USOF: 21564 • MDO: 9194 • Revenue Share: 13000 • Overall: 43,758 	<ul style="list-style-type: none"> • USOF: Rs 77 Cr. • MDO: Rs 66 Cr. • Revenue Share: Rs 110 Cr. • Overall: Rs 253 Cr. 	<ul style="list-style-type: none"> • To commission Wi-Fi at remaining 21,166 rural exchanges by September 2018. 	<p>Circles explore business opportunities from Gol Smart City projects, MHRD projects, State Government proposals, local government</p>	<ul style="list-style-type: none"> • Commission 5,000 Hotspots • Circles explore ways to get more business opportunities

BSNL Wi-Fi - Operations



West Zone has the maximum percentage of Faulty Aps to Total Aps as compared to other zones



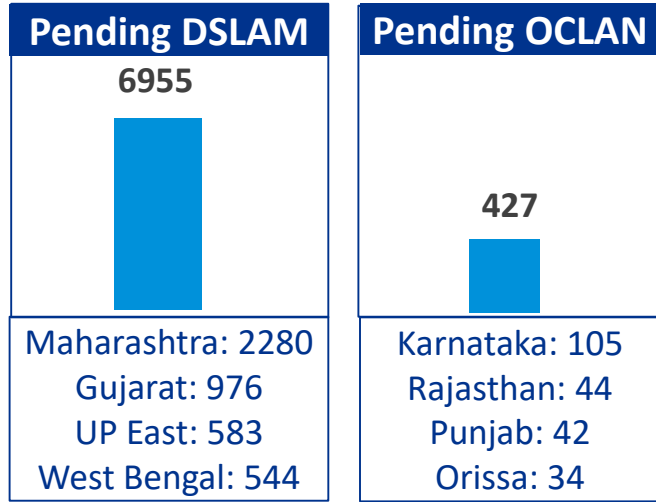
BBNW



BBNW Circle Issues

BBNW

Poor Backhaul Upgradation

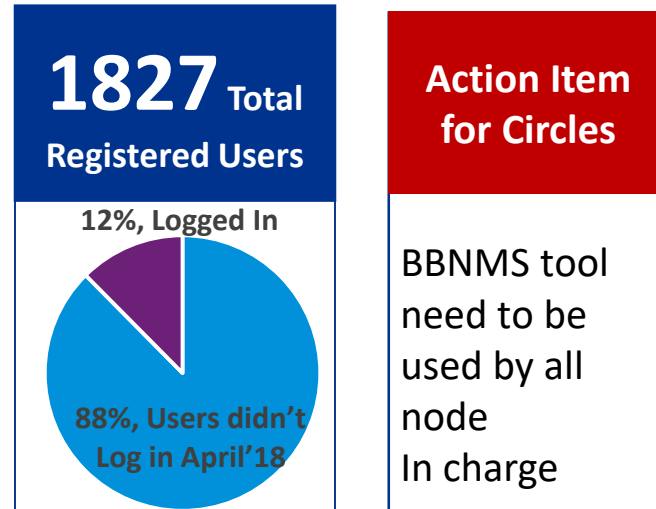


MNG Add-On Project

702 Elements to be installed

Action Item for Circles keep Infrastructure and Fiber ready

BBNMS



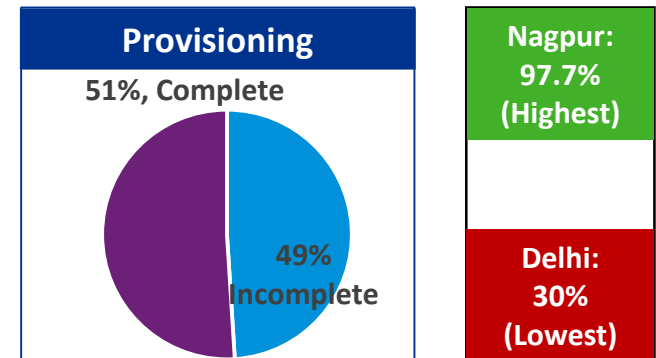
NEW BNG Project

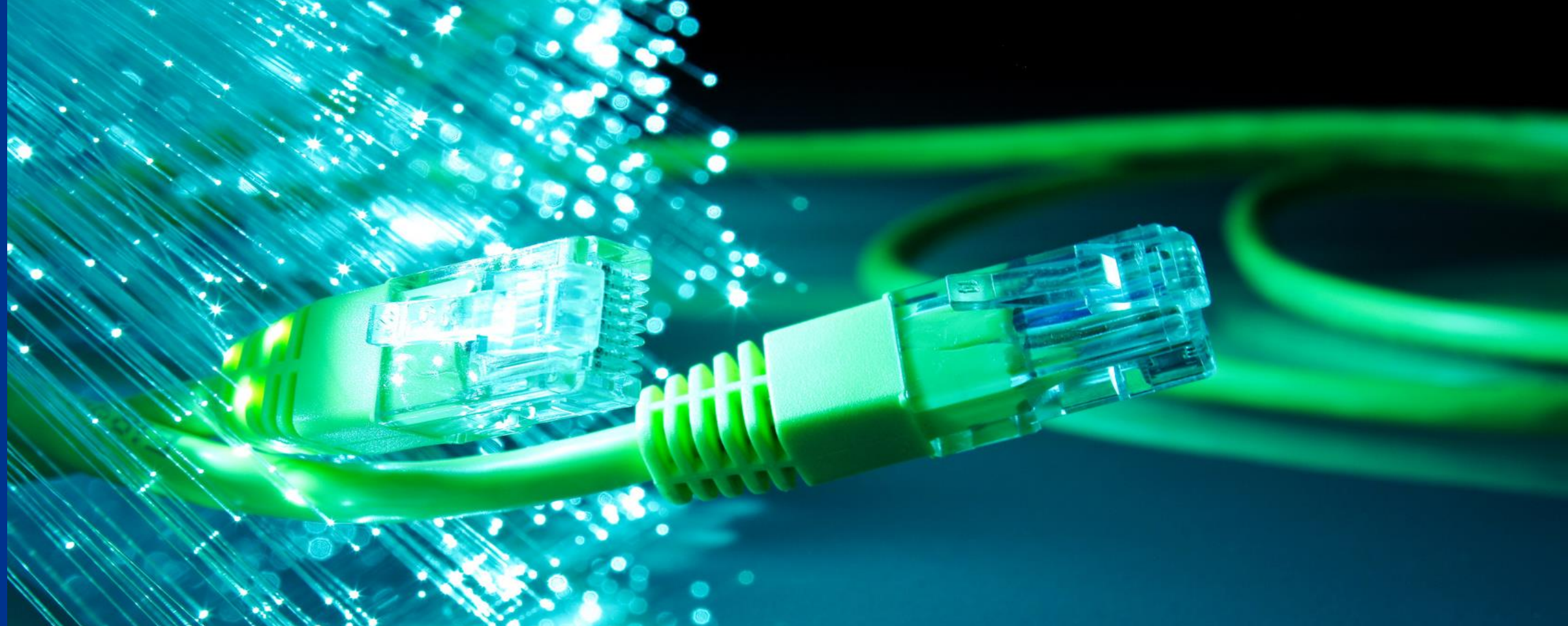
62 BNGs to be installed in all the circles

MTTR (as per BBNMS)

BNG	RPR	OCLAN
<p>Bihar: 4 Minutes (Lowest)</p>	<p>UT: 8 minutes (Lowest)</p>	<p>A & N: 58 minutes (Lowest)</p>
<p>North East 1: 17 hours (Highest)</p>	<p>Chennai: 55 hours (Highest)</p>	<p>Kerala: 11 Hours (Highest)</p>

SSTP



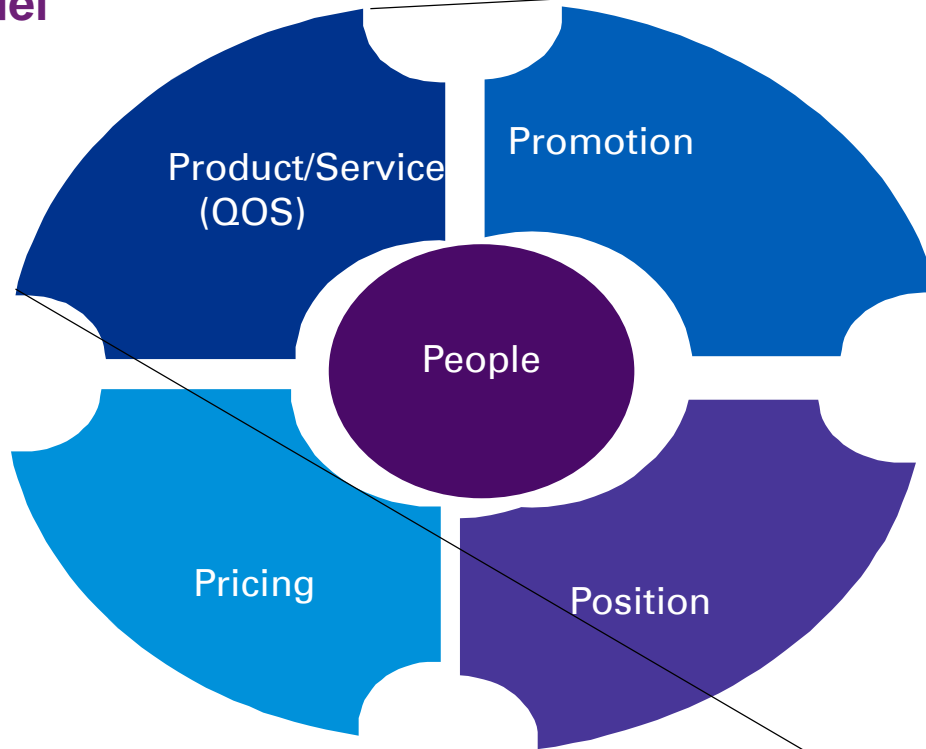


NWO - BB/IN



CFA-NWO-BB/IN

5P Model



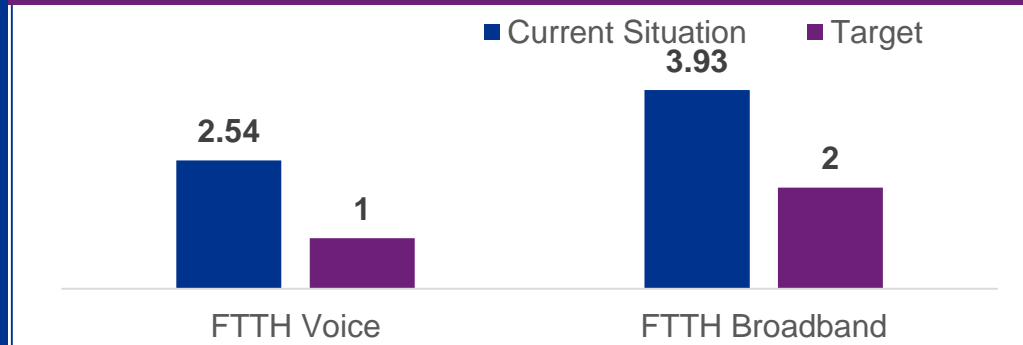
Initiatives to achieve the targets:

- Broadband Maintenance Outsourcing
- New Initiatives to be deliberated Ex RJ circle

Product/Services-QOS Achieved 2017-2018/Target 2018-19	
Fault Rate	Current: 8.4% Target: 5%
	Current: 70% Target: 81% Provisioning in 3 days
Repeat Fault	Current: 19% Target: 8%
	Current: 50% Target: 68% Fault Clearance in 24 hour
DSLAM/BB faults	Target: 0

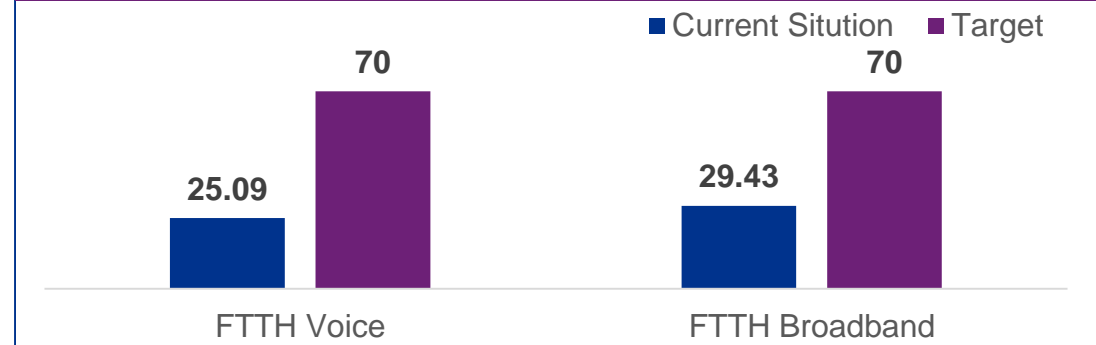
FTTH - Operations

Fault Rate (2017-18)



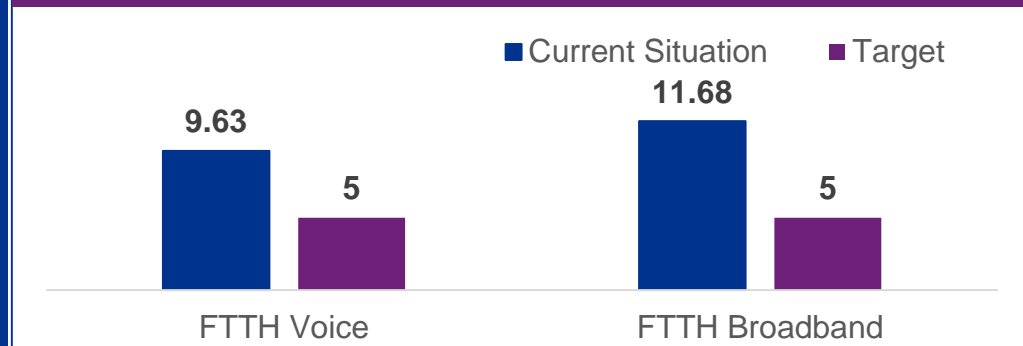
FTTH Voice – > 150% more Fault Rates than target
 FTTH Broadband - > 95% more Fault Rates than target

Fault Clearance 24 Hrs (2017-18)



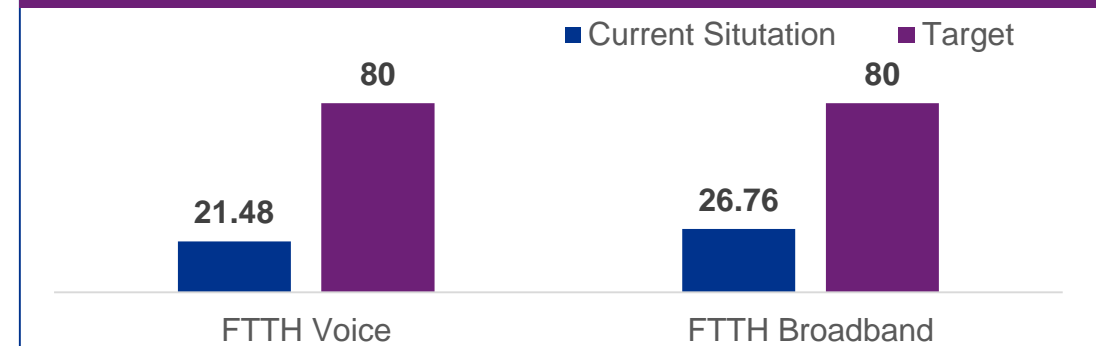
FTTH Voice – 64% less Fault clearance than target
 FTTH Broadband - 58% less Fault clearance than target

Report Fault (2017-18)

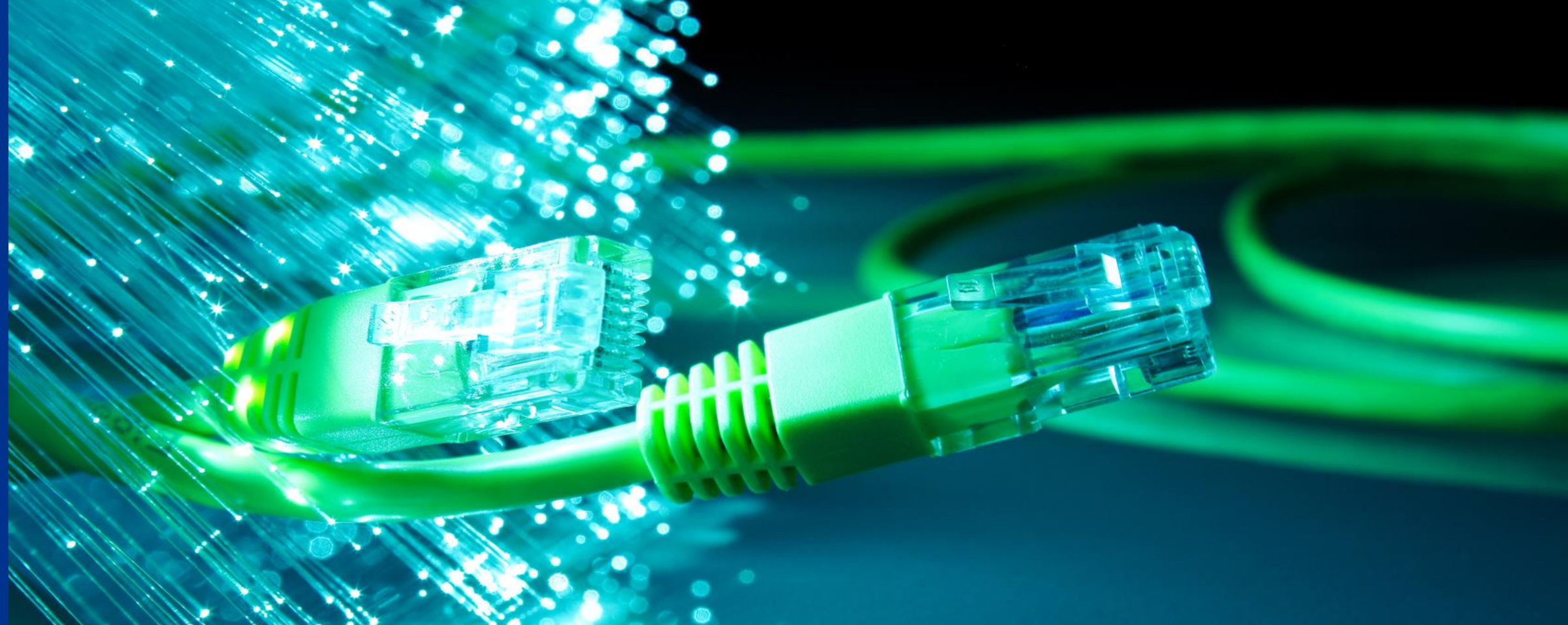


FTTH Voice – > 92% more Repeat Faults than target
 FTTH Broadband - > 130% more Repeat Faults than target

Provisioning Within 3 Days



FTTH Voice – 74% less provisioning than target
 FTTH Broadband – 67% less provisioning than target

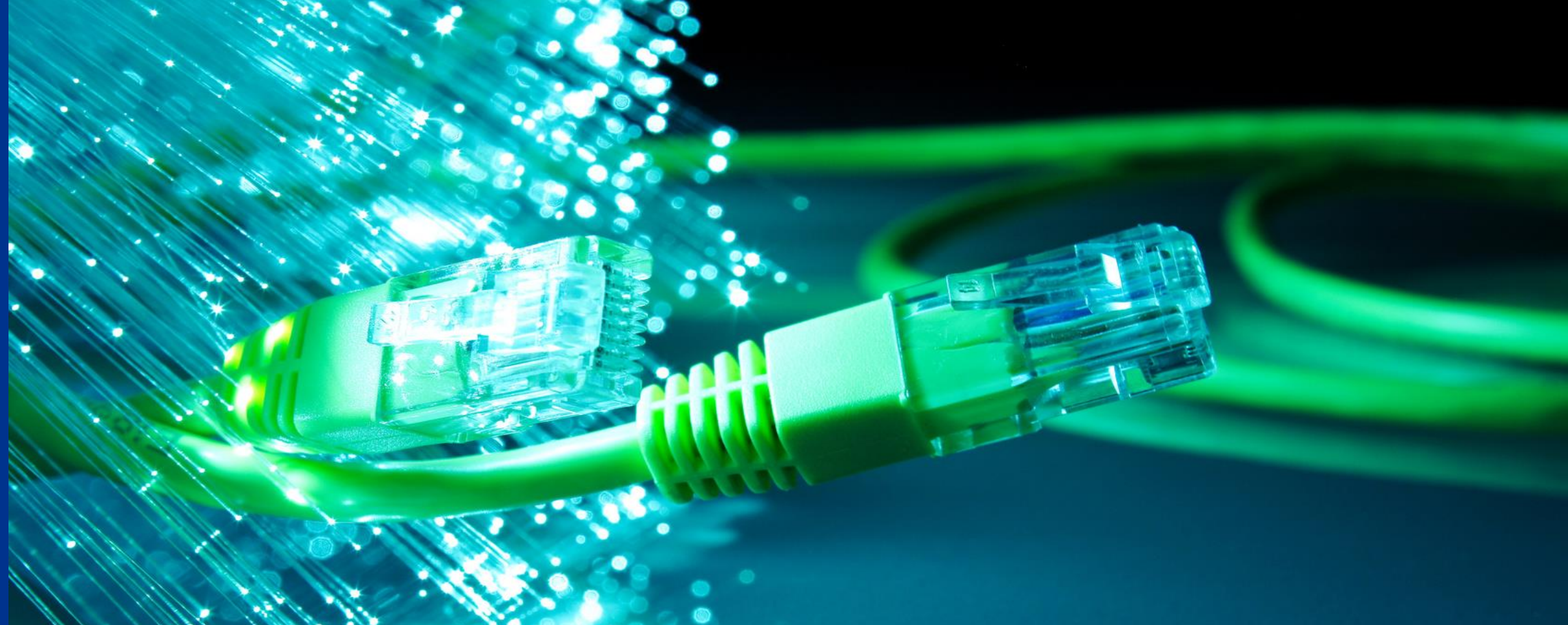


NWP - CFA (Landline)

Landline

CLIP	PIJF Cable	PIJF Cable Laying tender
<ul style="list-style-type: none"> • More than 9 Lakhs CLIP instruments are available which are sufficient for more than 12 months • Some circles are having CLIP inventory for more than 2 years (viz. JKD, AS, A&N, UKND, CHGR & HR) • Diversion orders have been issued for the circles having CLIP availability less than 5 month 	<ul style="list-style-type: none"> • 33.08 LCKM cable available, sufficient for 12 months • Average utilization of lower size cable is 55.44% (BH, JKD to improve utilization). Diversion orders issued for needy circle • Average utilization of higher size cable is 18.85%(BH, HP, NE-2, J&K, CHGR &TN to improve utilization • Tender for Procurement of 10-20 Pair PIJF cable (3.78LCKM) is under process 	<ul style="list-style-type: none"> • 55% SSAs i.e. 184 out of 334 SSAs are having PIJF cable laying tender • HP, TL, J&K, WB, AP, PB & UPW have to expedite the cable laying tender

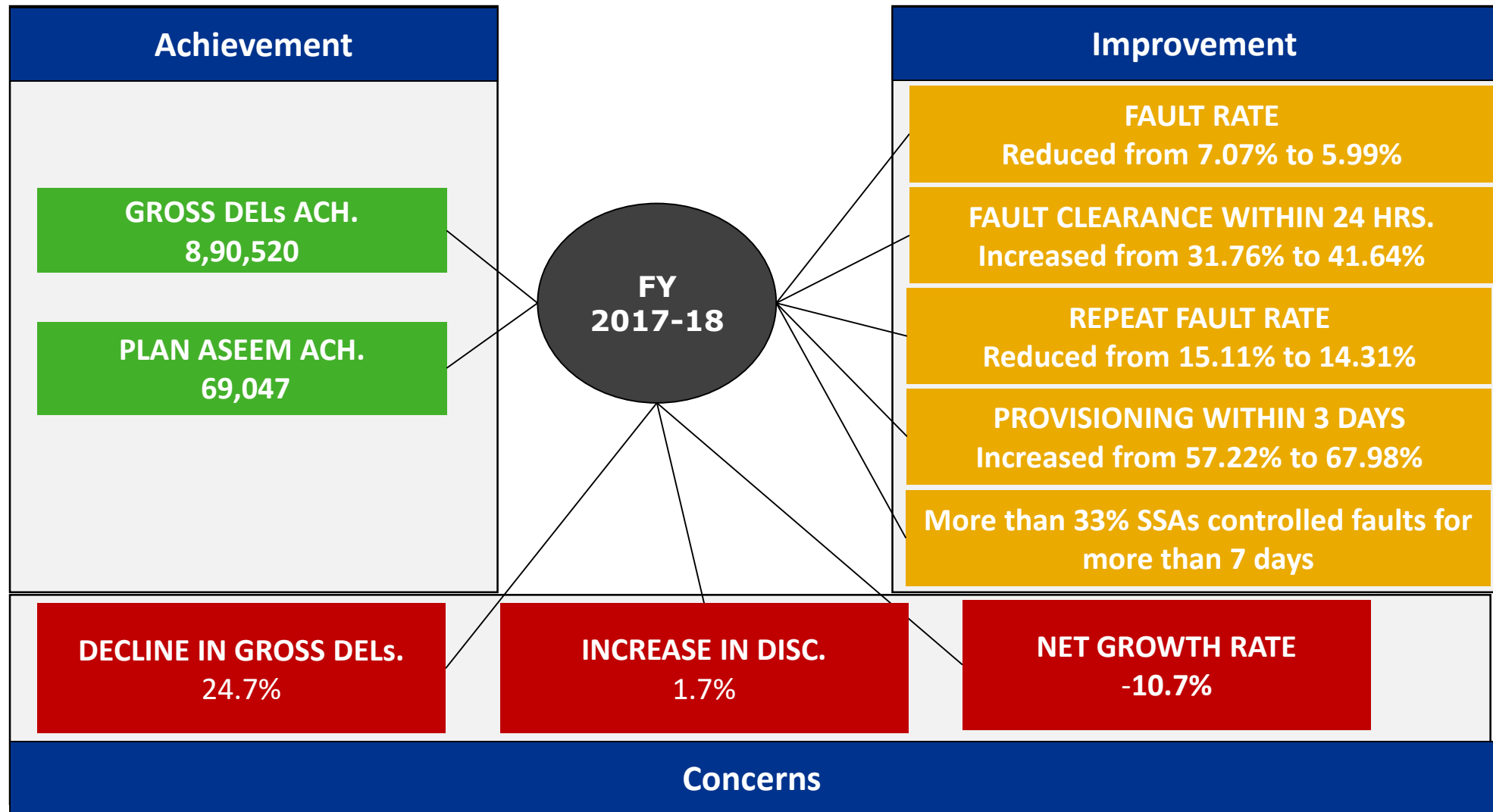
Sufficient inventory available, It is upto circle how speedy they utilize to convert into Customer base



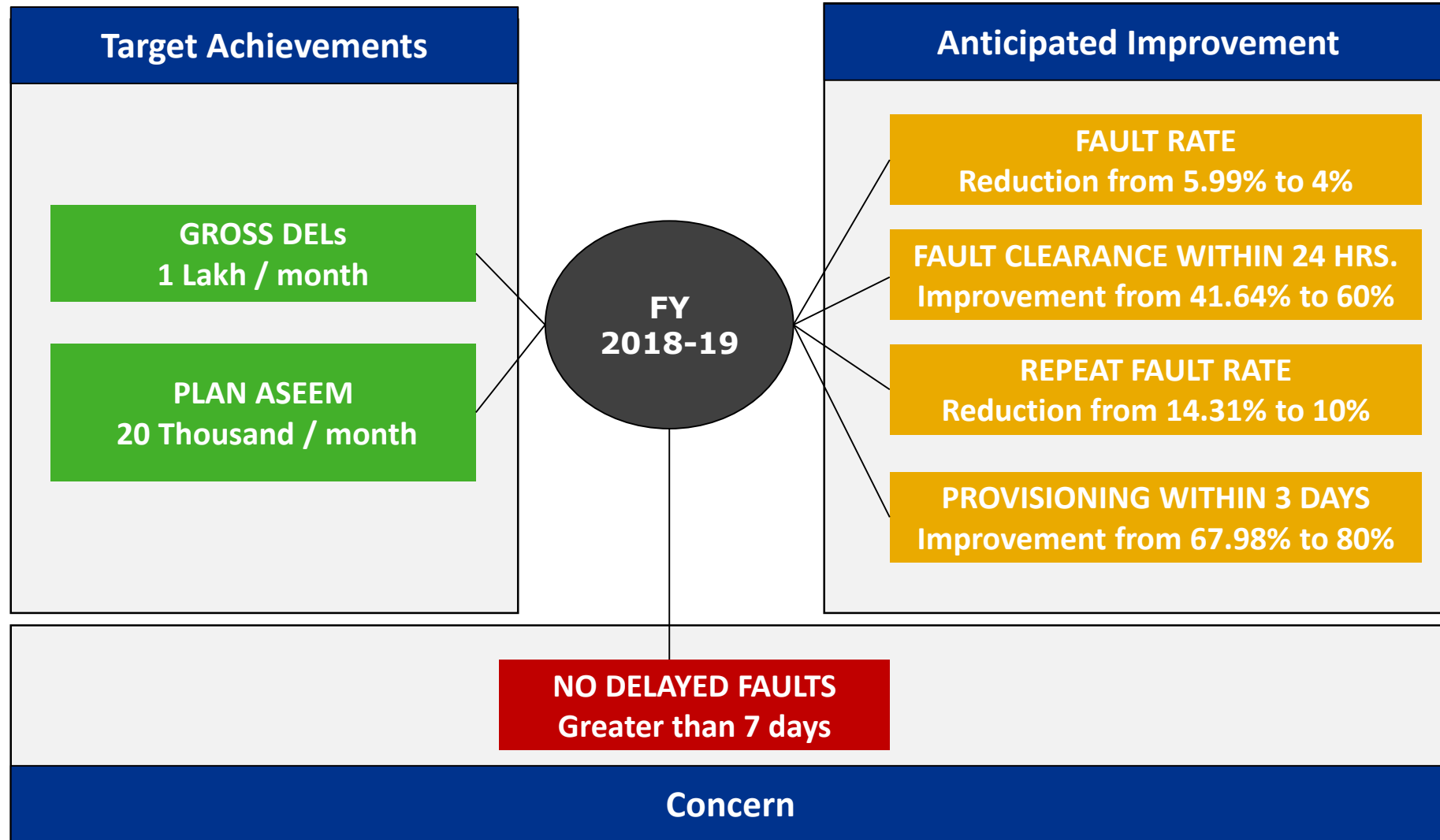
NWO - CFA (Landline)



Landline During past 2017-18



Landline Future plan 2018-19



Future Strategy of 2018-19

NWO - CFA (Landing)

Focus on providing maximum connections within 2 KM area from Exchange

Door to door campaign and awareness about latest Landline plans of BSNL prospective customers

Educating internal staff also about the latest plans of BSNL

Wide publicity of BSNL strength of Landline at prominent places and our own Assets

Beyond 2 KMs focus on providing plan ASEEM connections

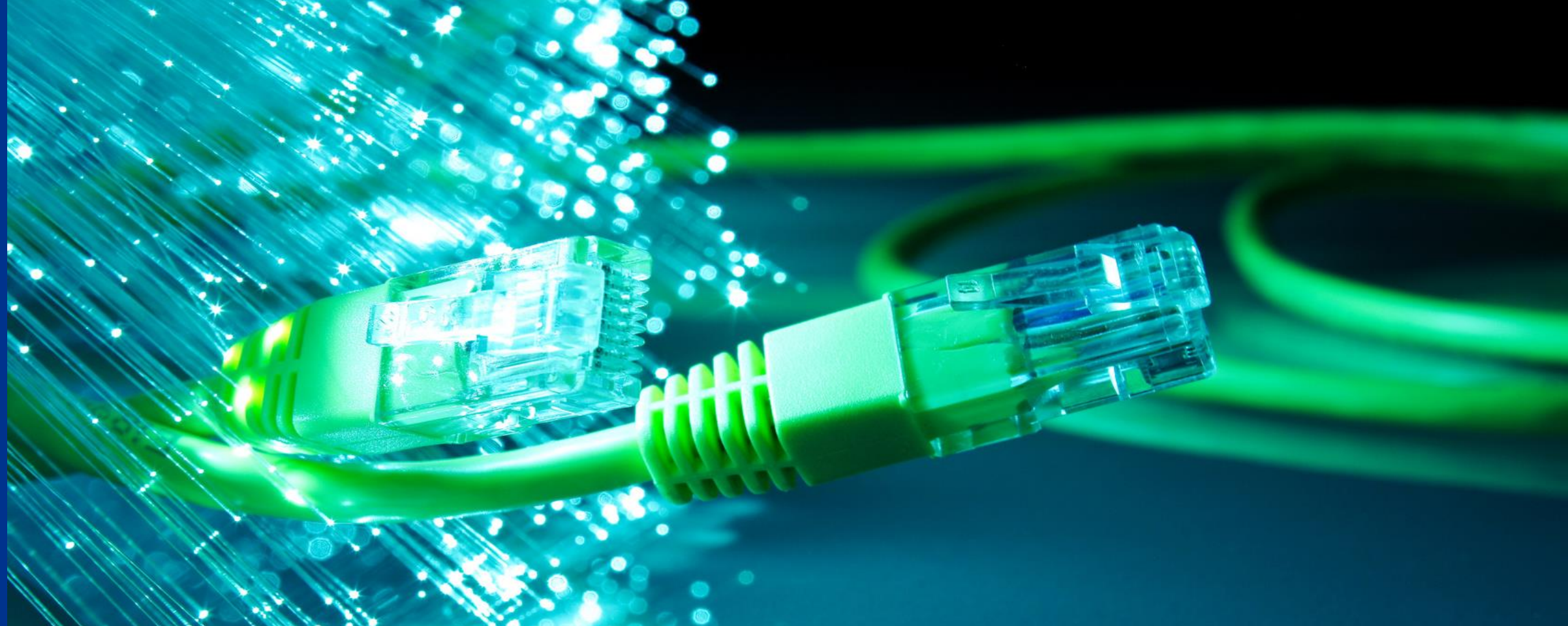
Nearby area of existing primary cable be made feasible for providing new connections

Target to be escalated up to Lineman level on monthly basis and monthly acknowledgement of their performance by the Unit head in presence of BSNL field staff

Know your strength of BSNL Cable Network and utilize good pairs

Use of CFA funnel system to create pre-leads

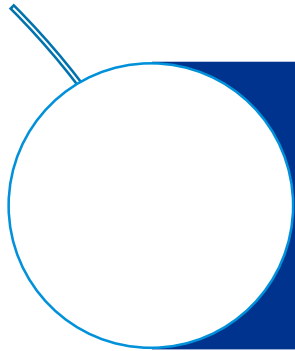
Retaining the existing customers



NCNGN

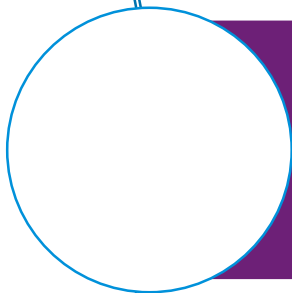


Projects



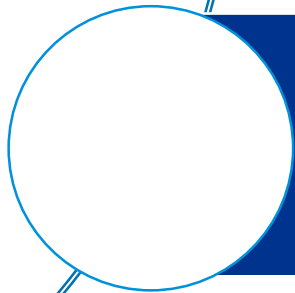
Project 1: 4Mn Capacity

Pkg-1 (Core): -Completed
 Pkg-II (Access):-2.77Mn ports supplied and commissioned.
 Under Ph-II, Migration pending for 5LMG in # sites at Assam



PROJECT 2: 2.4 Mn -Core & 5Mn- Access

Pkg-1 (2.4 Mn):- Core supplied , commissioning by 31.05.2018.
 Pkg-II PO issued Commissioning target-September 2018.



Project 3: C-DOT MAX NG Project

8 C-DoT Core commissioned.
 Migration status:- 170333 ports migrated
 Target for 100% migration- 31st July 2018.

Action Points for Circles

IMS- NGN:-

- No migration without Dual media Connectivity at Sites.
- All infrastructure points/ issues to be resolved before start of Installation.
- Circles to nominate BSNL teams for 50% site installation.

C-DOT MAX NG:-

- 1GE/FE Dual connectivity at all sites.

Operational issues

Current Status of Operations Issues

- Continuous monitoring of O&M issues at Circle.
- All reported issues resolved except TWO issues.
- PRI- Data is being resolved.

Important O&M Instruction/ Suggestion from NGN

- L1 (SSA), L2(Circle) and L3(RCNGN) team formed for every Circle . L1 & L2 issues to be resolved at SSA/ Circle only.
- NGN faults , O&M complaints/ issues are to be registered only on UTStarcom web portal www.utstarcomtsc.com and new portal for Huawei project:- ngnhelpline.bsnl.co.in.
- Primary link dark fibre:- for switch over from Primary to SECONDARY LINK OF LMG, Primary link is advised to be on dark fibre.

NGN Value Added Services

NGN VAS Status

- LFMT (With Video Call facility):- 19,806
- MMVC:-220
- IP Centrex:-39483
- FMC:-211
- Prepaid LL:-42

Fixed Mobile Telephony

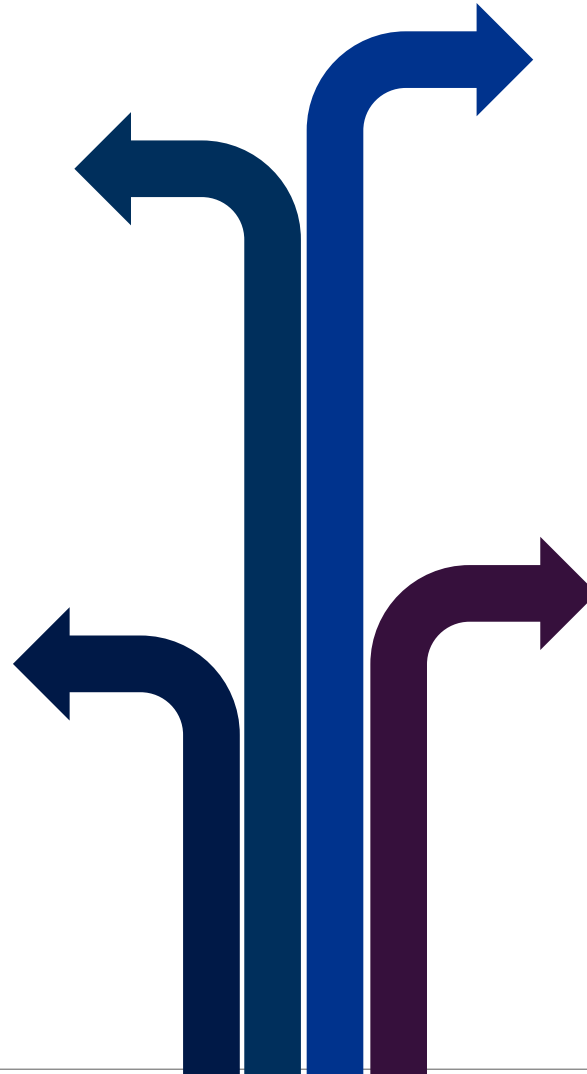
NGN VAS Services planned to be launched by Hon'ble MOC:-

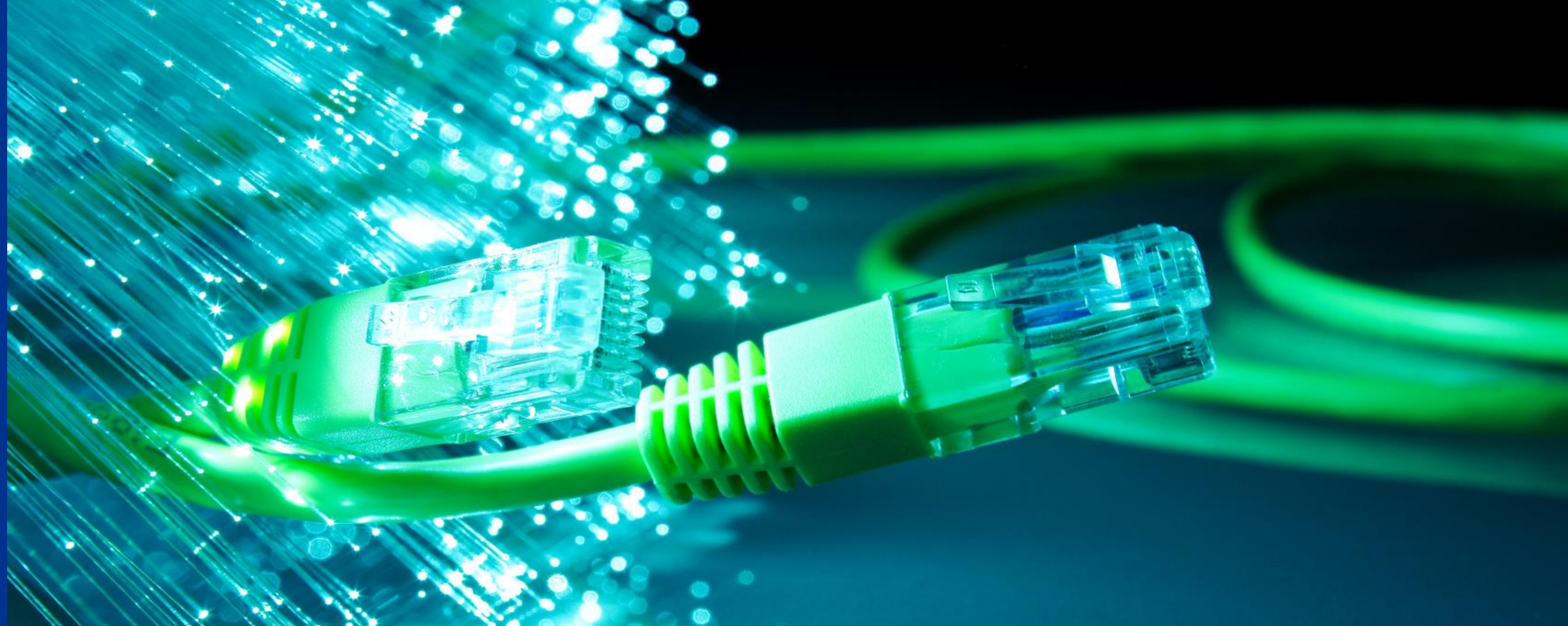
NGN VAS Services

- LFMT with Video
- MMVC
- IP -Centrex
- FMC
- Prepaid LL
- Free Audio Conferencing

Expectations from Circle

- Pamphlets with CAF.
- Demonstrative display at CSCs.
- NGN-VAS videos on Circle website and social media.





ITPC



CDR Consolidation

Smart interaction with Customers (Social media /Chat bot /Web Chat etc.) – CDR system Application

Partner management solution

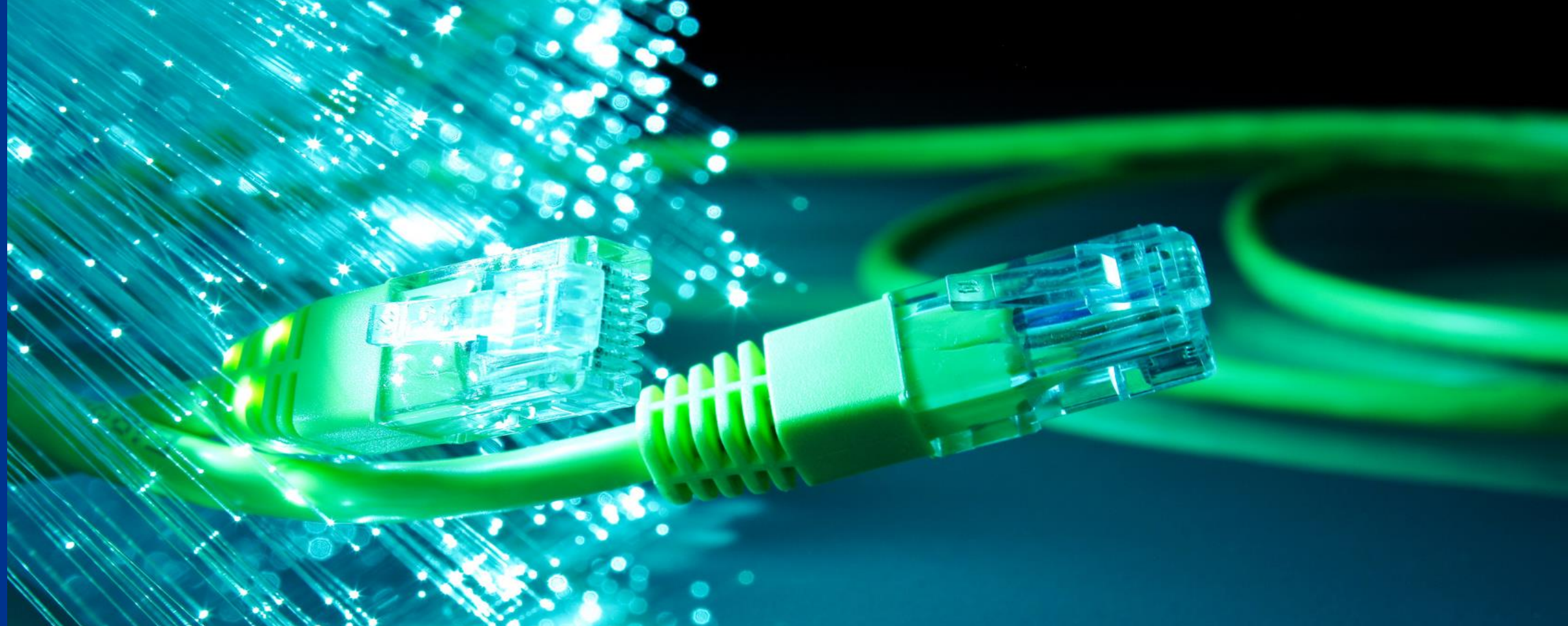
Consolidated CDR from existing four data centre to one data centre

GPS and Mobile App based work force management

Improved report for Circle /SSA/Corporate office through advanced data analytic tools

Status Update

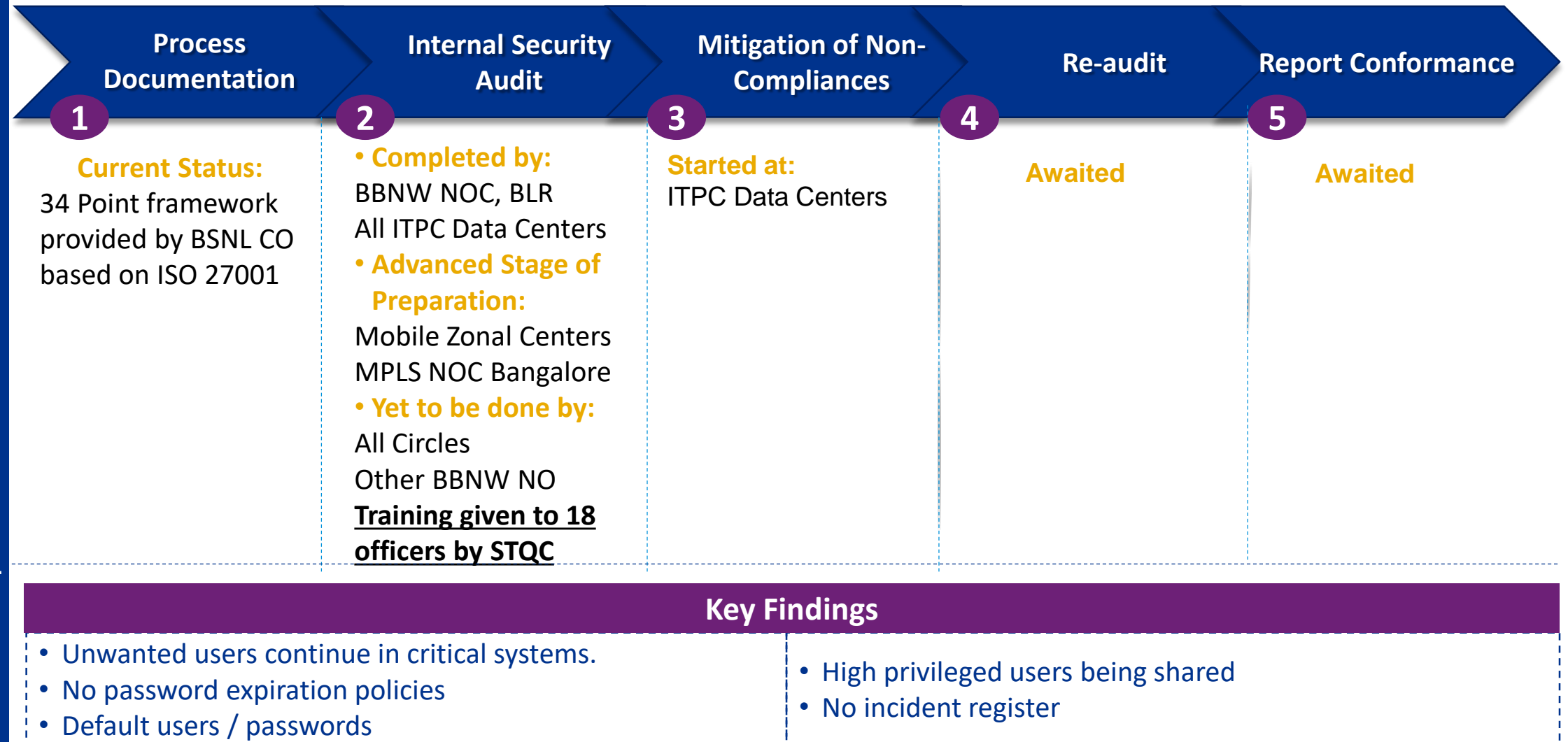
Activity	Status
Implemented franchisee management portal	16 Circles and 57 SSA
Implemented CWSC portal Phase –II (Leased circuit /NGN VAS)	Operational Circles
Implemented Mobile App for Line staff for handling /monitoring of fault and GSP based attendance	Next Week Field Trials in 2-3 SSAs
CACMS project Phase –I	Land Line – Filed Trials GSM -Launched in all Circles
EB Initiative – SMART DOT Project for development of portal for management of life cycle of Telecom operators /ISPs	Process in Pipeline
Implemented Inspection portal and VAS portal	Operational in All Circles



Corporate IT



Annual Internal Security Audit



Action Points - Info Security

Websites / Web Applications

Web Hosts

Strict compliance to guidelines circulated by Info Security Cell, BLR

Web Applications

Strict compliance to guidelines circulated by Info Security Cell, BLR

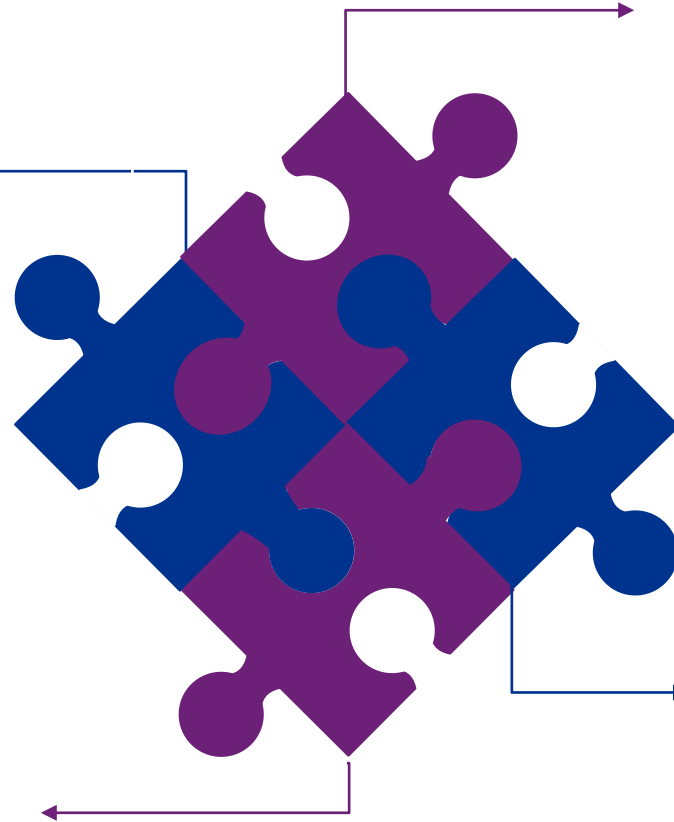
Roles & Responsibilities

Corporate Level:

Steering Committee
CISO
Info Security Managers

Circle Level:

Info Security Officers Security Committee – Nominated only by 7 Circles yet



Capacity Building & Trainings

Completed:

Awareness Workshops	- 4
Ethical Hacker	- 1
ISMS Awareness	- 1
Certified Auditor	- 1

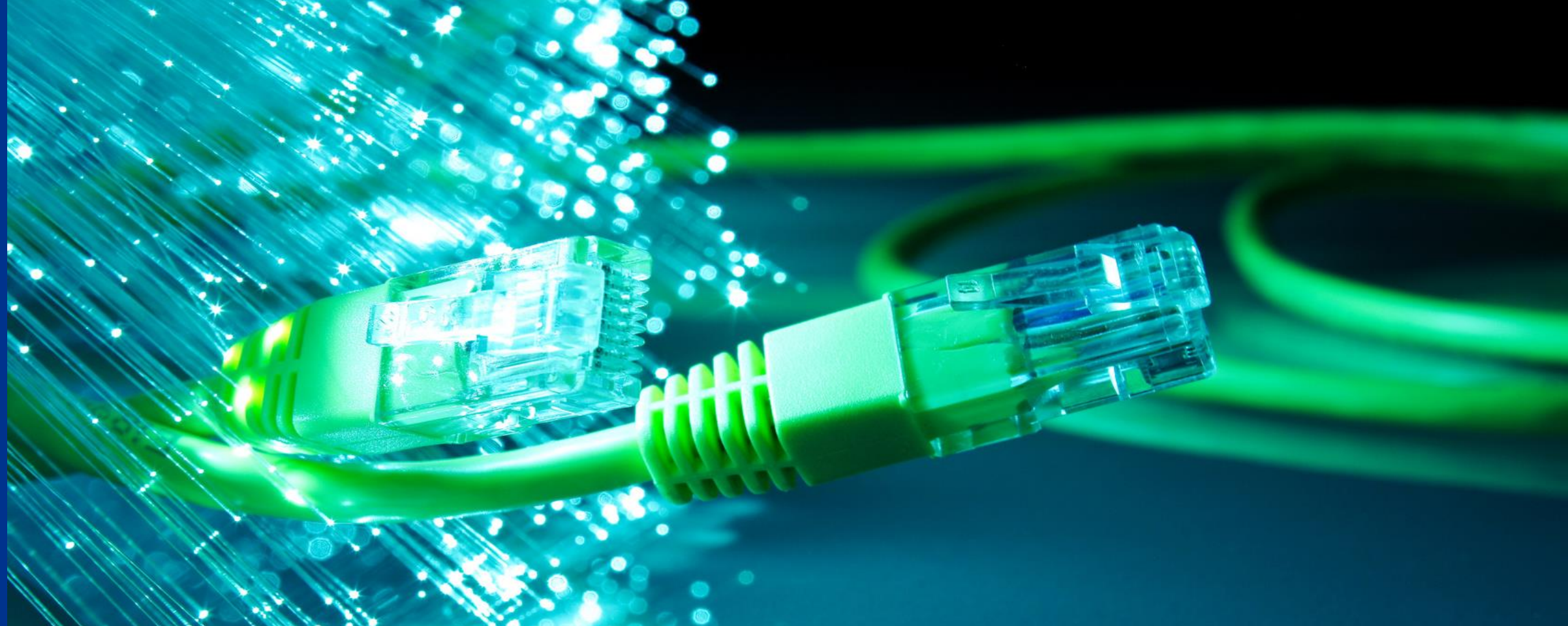
Scheduled:

Auditors	- bimonthly
Awareness Workshops	- 3

Other Actions

VAPT – Vulnerability Assessment & Penetration testing

Security Inspections by DoT



Smart City



A Smart City Challenge was conducted to select **99 Smart Cities** in the entire Country

Smart City Challenge Overview

- To capture the spirit of competitive and cooperative federalism, the Ministry of Urban Development (MoUD) is using a competition method to select smart cities.
- Cities are diverse - Each city has to construct its idea and vision of a smart city that is aligned to its local context
- Each participating city proposed its plan in the form of a smart city proposal for it to become a smart city.
- The city selection process follows a Challenge method - two stages, in conjunct, to select cities

Smart City Proposal

- The Smart city proposal comprised of the following elements:
 - Concept of the smart city
 - Vision and mission of the city
 - How will the city achieve the vision
 - Schedule of the projects planned

Selection of Smart Cities

Stage I

Intra-State city selection on objective criteria to identify cities to compete in stage-II.

Stage II

All India competition to select smart cities for multiple rounds of selection.

Smart City Challenge: Key Statistics

99 **Winning Proposals**

\$31.40 billion
Total Project Cost

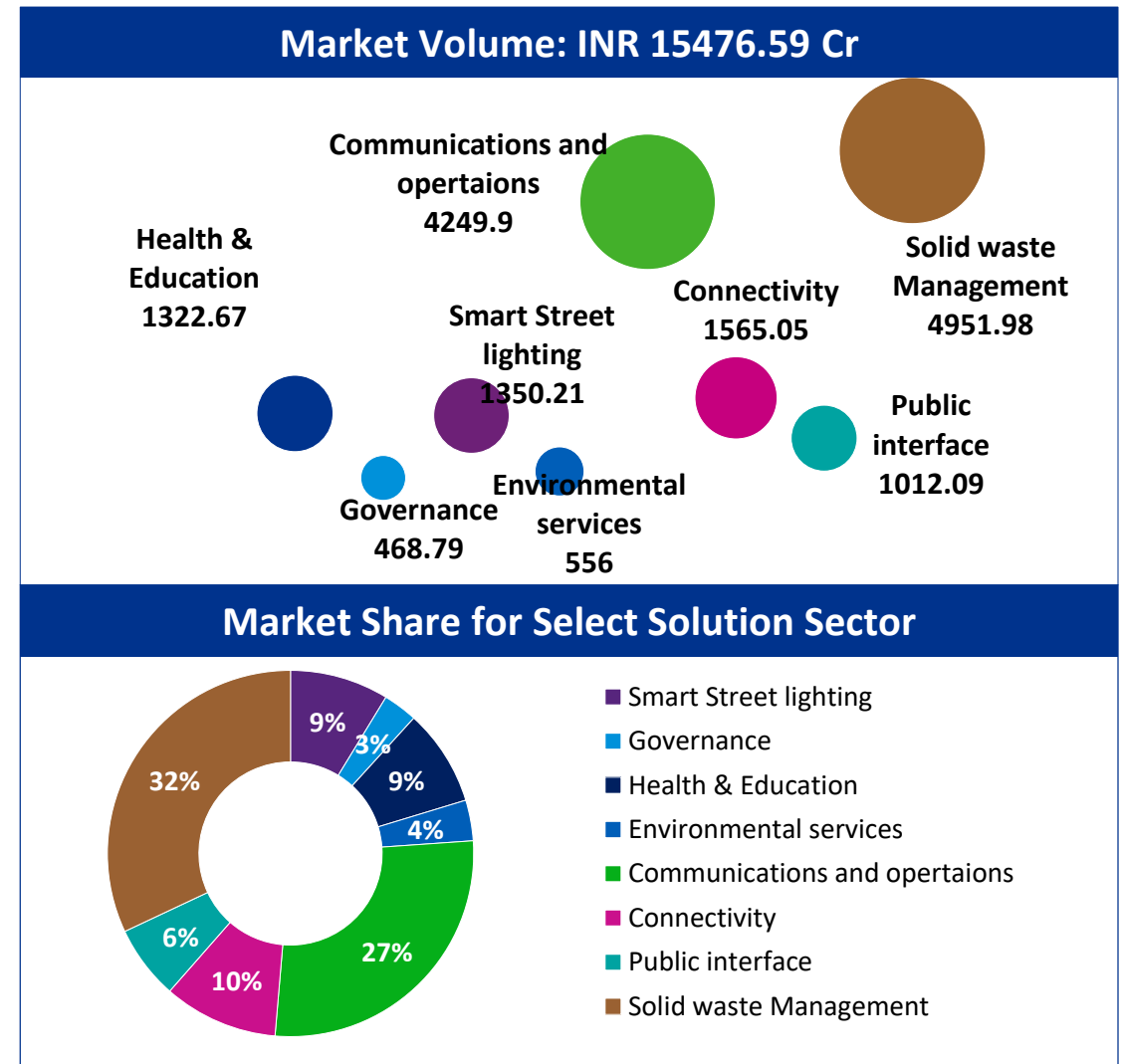
99 million
Population Impacted

81%
ABD

19%
PAN

Smart City Development involve providing smart solutions across different sectors that has created a **large market opportunity**

Health & Education	<ul style="list-style-type: none"> Developing smart classroom Development of smart health centers/ kiosk, Development of hospitals and super specialty hospitals
Governance	<ul style="list-style-type: none"> Projects involving systems for citizen grievance redressal, e-Gov, e-ticketing for tourists and upgrading social services
Smart Street lighting	<ul style="list-style-type: none"> Solar and LED enabled street lighting (Smart Poles) Lighting of heritage structures
Environmental services	<ul style="list-style-type: none"> Developing water and air quality monitoring systems Stray animal rehabilitation
Communication and operations	<ul style="list-style-type: none"> Developing smart surveillance systems Command and control centres Drone surveillance, CCTVs, RFID enabled traffic sensors, SCADA systems ICT enabled government services and GIS enabled spatial mapping
Connectivity	<ul style="list-style-type: none"> Public Wi-Fi WiFi hotspots for schools Installation of fibre optic cables
Public interface	<ul style="list-style-type: none"> Public outreach or e-Gov apps Information kiosks Incidence reporting alert apps
Solid Waste Management	<ul style="list-style-type: none"> Smart bins ICT enabled waste collection systems Automated sewer cleaning systems



Status Update

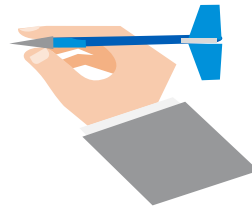
Total Win	
Tender	7
Nomination	5



Revenue	
Billed	~ INR 150 Cr



Total Tender submitted
14



Tender in Pipeline
17



**“Think Big,
start small,
act NOW!”**

