# "हिंदी केवल एक भाषा नहीं बल्कि हमारी राष्ट्रीय पहचान है।"



# आईटीआई लिमिटेड

पंजीकृत एवं निगमित कार्यालय आईटीआई भवन, दूरवाणीनगर, बेंगलुरु - 560 016 भारत

फोन : +91 (80) 2561 4466 फैक्स : +91 (80) 2561 7525 वेबसाइट : www.itiltd-india.com

सी आई एन: L32202KA1950GoI000640

Ref: K/ BSE & NSE/ 2019

## ITI LIMITED

Registered & Corporate Office ITI Bhavan, Dooravaninagar, Bengaluru - 560 016, India

Phone : +91 (80) 2561 4466

Fax : +91 (80) 2561 7525

Website : www.itiltd-india.com

CIN : L32202KA1950GoI000640

January 7, 2019

#### The National Stock Exchange of India Limited

Listing Department Exchange Plaza, Bandra Kurla Complex Bandra (East) Mumbai 400 051

Security ID: ITI

**BSE** Limited

Department of Corporate Services Floor 25, Phiroze Jeejeebhoy Towers Dalal Street Mumbai 400 001

Security code no.:523610

Dear Sir/ Madam,

# <u>Sub.: Disclosure pursuant to Regulation 30 and 46 of the Securities and Exchange Board of India</u> (<u>Listing Obligations and Disclosure Requirements</u>) <u>Regulations</u>, 2015

Pursuant to Regulation 30, read with Scheduled III and Regulation 46 of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended from time to time ("SEBI LODR Regulations") we hereby intimate that an investor presentation has been prepared by the Company, which is available at the following weblink <a href="http://www.itiltd-india.com/Investor%20information/ITI">http://www.itiltd-india.com/Investor%20information/ITI</a> Roadshow%20Presentation

We request you to take this on record and that the same be treated as compliance under the applicable regulation(s) of the SEBI LODR Regulations.

Thanking you,

Yours faithfully,

For ITI Limited

S Shanmuga Priya

**Company Secretary and Compliance Officer** 



# **ITI Limited**

# INVESTOR PRESENTATION

**January 2019** 

#### **Disclaimer**

ITI Limited is proposing, subject to receipt of requisite approvals, market conditions and other considerations, to make a further public offer of its equity shares and has filed a draft red herring prospectus dated September 27, 2018 ("DRHP") with the Securities and Exchange Board of India ("SEBI"). The DRHP is available on the website of the SEBI at www.sebi.gov.in websites of the stock exchanges, BSE Limited and National Stock Exchange of India Limited at www.bseindia.com and www.nseindia.com, respectively, and on the websites of the lead managers, BOB Capital Markets Limited, Karvy Investor Services Limited and PNB Investment Services Limited at www.bobcaps.in, www.karvyinvestmentbanking.com and www.pnbisl.com, respectively. Potential investors should note that investment in equity shares involves a high degree of risk and for details relating to such risk, see "Risk Factors" on page 12 of the DRHP. Potential investors should not rely on the DRHP for any investment decision, and such investment decision should be made solely based on the Red Herring Prospectus once available.

The Equity Shares have not been and will not be registered under the U.S. Securities Act of 1933 ("U.S. Securities Act"), and may not be offered or sold within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act and applicable U.S. state securities laws. Accordingly, the Equity Shares have been offered and sold (i) within the United States only to qualified institutional buyers (as defined in Rule 144A under the U.S. Securities Act, "Rule 144A") and referred to in the DRHP as "U.S. QIBs", for the avoidance of doubt, the term "U.S. QIBs" does not refer to a category of institutional investor defined under applicable Indian regulations and referred to in the DRHP as — QIBs in reliance on Rule 144 A or another available exemption from the registration requirements of the U.S. Securities Act and (ii) outside the United States in offshore transactions in compliance with Regulation S under the U.S. Securities Act and pursuant to the applicable laws of the jurisdiction where these offers and sales occur. Prospective purchasers are hereby notified that the seller of the Equity Shares may be relying on the exemption from the registration requirements of the U.S. Securities Act provided by Rule 144A. The Equity Shares have not been and will not be registered, listed or otherwise qualified in any other jurisdiction outside India and may not be offered or sold, and Bids may not be made by persons in any such jurisdiction except in compliance with the applicable laws or such jurisdiction

# **Presentation Path**





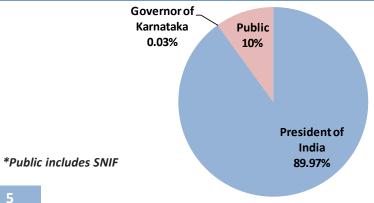
# **Brief Overview of ITI Ltd**



#### **Business Overview**

- ITI Ltd is a PSU under Dept. of Telecommunications (DoT) offering diverse suite of products & services across various industry segments
- ITI has 5 facilities with modern manufacturing infrastructure located at Bengaluru, Mankapur, Naini, Palakkad & Raebareli and a R&D centre in Bengaluru
- Engaged in projects of national importance such as ASCON, BharatNet, Network for Spectrum, Smart Energy Meters, Space Programs and various E-governance projects
- Strong relations with various PSUs such as BSNL, BBNL, MTNL, EESL; Ministry of Defence (MoD), Ministry of Rural Development (MoRD), Registrar General & Census Commissioner of India, among others
- Strong order book comprising of a diversified products and services. As on Aug 31, 2018 the order book was valued at Rs12,111.7crs
- Skilled workforce comprising of 3,427 employees, including more than 710 employees with technical and professional qualifications as of Aug 31, 2018

# **Ownership Structure**



## Summary Consolidated (IND AS) Financials (INR Crs)

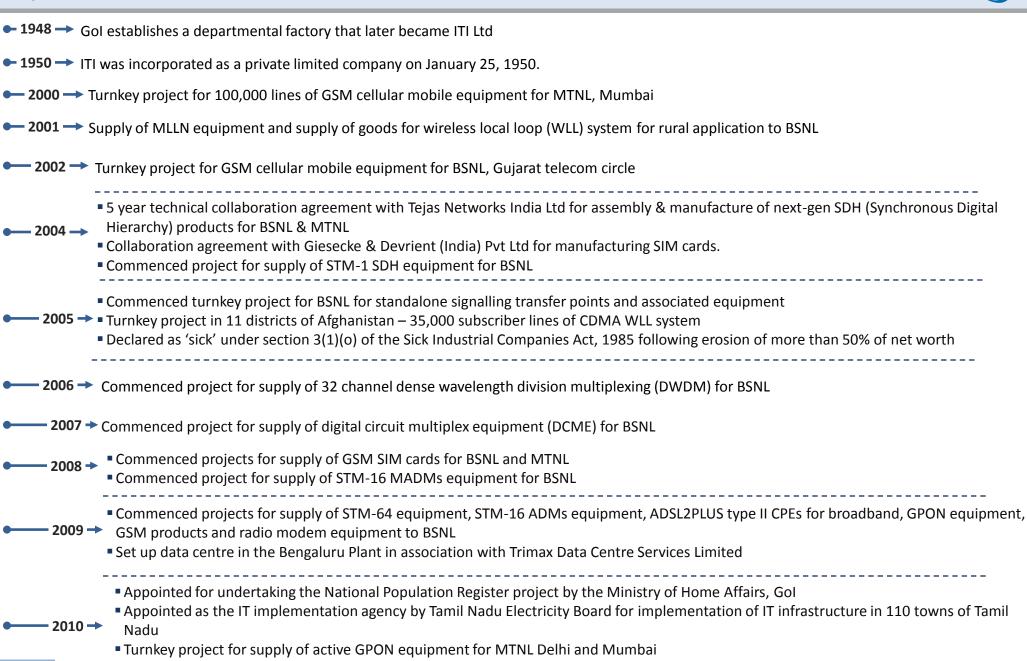
Particulars	FY15	FY16	FY17	FY18
Revenue from Ops	579.1	1,193.3	1,548.1	1,484.2
Other Income	84.9	597.0	540.6	327.5
PAT	(299.8)	252.6	302.9	232.0
Net worth	(1,910.5)	(1,637.1)	(1,248.6)	(674.0)
Net Debt	1,220.8	1,138.9	1,179.2	1,226.3

# **Key Products & Services**

- Giga Passive Optical Network (GPON)
- Managed Leased Line Products (MLLN)
- Multi-capacity Encryption Units & Electrical Products
- Internet of Things (IoT)
- O&M for Base Transceiver Station (BTS)
- **Data Centre Hosting Solutions**
- **Annual Maintenance Services**
- IT & software services such as -
  - **Digital Wallet Solutions** 
    - **Aadhar Authentication Services**
    - Cable & Fibre Laying Services
    - Citizen Centric Services

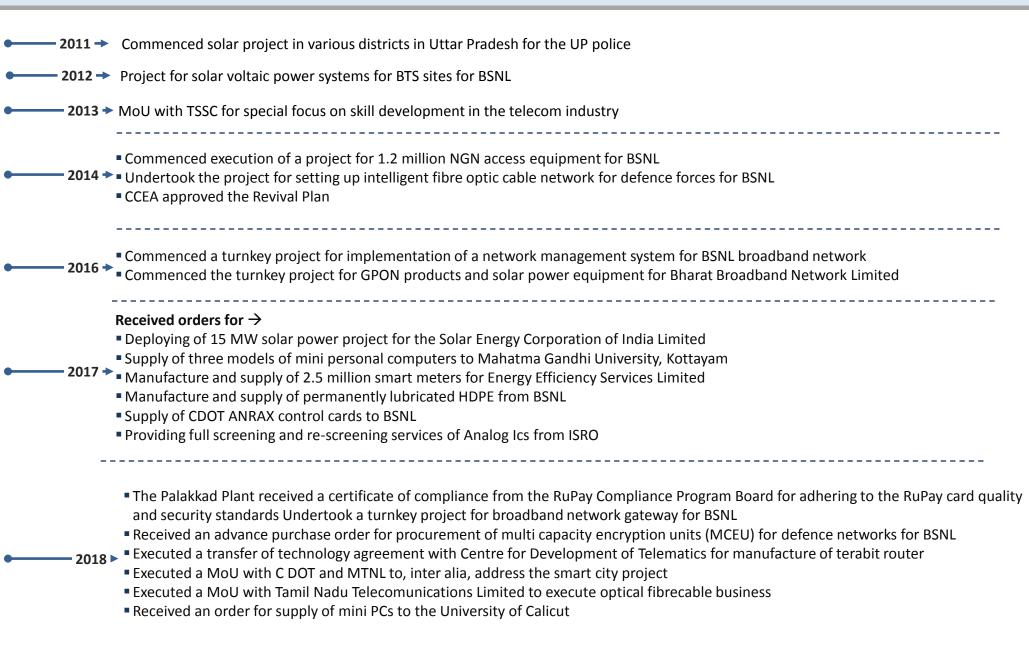
# **Key Events and Milestones**





# **Key Events and Milestones**









### Defence Communication & Security Encryption Products & Services

Communication network projects for India's defence forces

#### Communication Projects

- Designed, manufactured, installed & maintained all three phases of ASCON for the Indian Army
- In negotiations with the MoD for ASCON Phase IV projectthe project is valued at Rs7,700crs
- Order for laying optical fiber cable under the NFS project for the Indian defence forces in the Eastern and North- Eastern region

#### Defence Security Encryption

- BEU encryptors to encrypt and decrypt Internet Protocol (IP) data (developed 3 types);
- PCM encryptors to encrypt and decrypt various types of data in PCM format.

# Optical and Data Network Products and Services and Passive Infrastructure Products

End to end portfolio of optical & data networking products

#### Broadband Products & Services

- Turnkey solutions for supply, installation, commissioning, O&M of GPON & associated equipment
- Raebareli Unit → Introduced machines for GPON equipment viz. 3D automatic optical, X-ray & solder paste inspection
- Bengaluru Unit → Upgraded to manufacture GPON equipment, also provide testing services for GPON cards & equipment
- GPON OLT units & ONTs → Phase I of "Bharat Net"

#### Passive infrastructure products

Optical network, data & voice traffic equipment- HDPE pipes & OFC

#### MLLN Products and Services

MLLN products & services, including turnkey solutions for supply, installation, O&M of network equipment to BSNL & MTNL

#### **IT Products and Services**

Hosting services along with a suite of IT & software services

#### Data Centre

- Tier 3 data centre in Bengaluru set up in collaboration with Trimax Data Centre Services
- Hosting & managed services to GoI organizations & private companies → currently has 96% occupancy
- Expanding data centre operations by building a Tier 3 plus data centre with 1,000 rack space; also ITI plans to expand its offering to include end-toend hosting & managed services

#### Software as a service (SaaS)

Suite of SaaS for financial & banking solutions - Aadhaar authentication & digital wallet services

#### IT Support Services

 ITI's SaaS packages are backed by active customer support services

#### Internet of Things (IoT)

State of the art infrastructure to manufacture IoT Products

ITI partners up with various technology companies & start ups to offer various IoT products & solutions. In particular ITI focuses its efforts on products including smart metering, smart health, smart environment, smart surveillance, smart e-governance etc

#### Annual Maintenance Contracts (AMC) and Operation & Maintenance Contracts (O&M)

AMCs for telecommunications and defence networks.

- AMC for first three phases of ASCON for MoD
- AMCs with BSNL & MTNL for maintaining OCB exchanges
- O&M for GSM network of BSNL in Tamil Nadu, Uttar Pradesh & Uttarkhand for the next ten years

Ability to offer diversified products and services to a broad base of customers across various industry segments



#### **Electronic Products Manufactured at ITI**



- Smart energy meters
- GPON OLT & ONT
- PCM multiplexers
- Electronic push button telephones
- Ruggedized telephones for defence forces
- Smart cards & banking cards
- Hand held terminals for smart card authentication
- Set top boxes
- Wi-Fi equipment
- Multiple types of encryption devices for defence
- PCM multiplexers
- Solar power modules
- Switched mode power supply module
- IoT products
- Radio modems
- AN rack hardware
- Mini personal computer
- Bank automation products

#### **Traded Electronic & Communication Products**



- Optical transport network (OTN) DWDM
- Managed leased line network products (MLLN)
- Signaling point network products
- IP/MPLS routers & switches
- Network management system solutions
- Microwave & satellite communication equipment
- Next generation network equipment
- IT products & solutions

#### **Contract Manufacturing Services & Solutions**



- ITI offers a variety of contract manufacturing services & solutions.
- Contract manufacturing services include electronic manufacturing at Bengaluru, Palakkad, Raebareli & Mankapur plants; mechanical fabrication & 3D printing services at Bengaluru plant; & electronic PCB manufacturing at Bengaluru & Palakkad plants





With over seven decades of experience in telecom technology → ITI is Evolving from a Telecom Equipment Manufacturer to a Telecom Technology Company

# Diverse product and services offering across sectors



# Diverse product offering to a wide customer base across diverse industry segments

- ITI caters to a wide customer base across various industry segments such as telecom, defence, information technology, banks and financial institutions and solar energy
- Diverse suite of products including defence security encryption; optical and data network & passive infrastructure products such as GPON, MLLN & signaling transfer point (STP) solutions, optical fibre cable, HDPE ducts, electrical products & IoT products.

### Wide range of IT & Software services

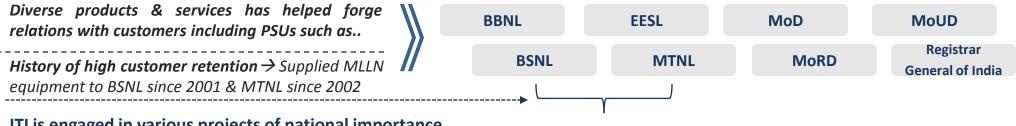
- ITI provides a wide range of services including IT & software services such as data centre hosting solutions, digital wallet solutions, Aadhaar authentication services, cable and optical fiber laying services
- In addition, ITI also offers citizen centric services such as National Population Register (NPR) & Socio Economic and Caste Census (SECC)

## Collaboration with third parties – De-risking Business Operations

• ITI's business model which focuses on collaborations with third parties for technology, R&D, as well as utilizing its large and modernized manufacturing capabilities enables it to provide comprehensive and integrated products and service offerings to its customers across sectors thereby de-risking its business model

# Well established relationship with certain PSUs, the Ministry of Defence & other Government agencies





#### ITI is engaged in various projects of national importance

**ASCON** – Providing maintenance services for ASCON in its first three phases

**BharatNet** – Manufacturing, supplying and installing GPON technology equipment for the Gol's flagship project "BharatNet", which aims to provide high-speed broadband connectivity to over 250,000 Gram Panchayats in India

Network for Spectrum (NFS) – Laying optical fiber cable under NFS project for Indian defence in Eastern & North-Eastern regions with BSNL

Smart Energy Meters – Manufacturing and supplying 2.5 million smart energy meters for EESL

**Space Programs** – Providing manufacturing and component screening services to the Indian space program

**E-Governance Projects** – Manufacturing & supplying products & services for e-Governance projects like the NPR, the SECC project and Addhaar authentication services  $\rightarrow$  ITI is one of the three agencies appointed by GoI for citizen centric projects

#### ITI contributes to a number of campaigns and policy initiatives sponsored by the GoI

# Make in India **Digital India**

ITI manufactures number of electronic, ICT & encryption products. Also, ITI has invited MNCsto enter into agreements, or manufacturing their products in India

ITI's data centre, digital wallet (TAG ITI), Aadhaar authentication & smart cards, along with IoT products are contribution to the campaign. Also, supplying & installing GPON technology equipment for "BharatNet"

#### **Pradhan Mantri Kaushal** Vikas Yojana (PMKVY)

Established skill development center in Bengaluru plant & plans to set-up skill centers in other manufacturing facilities

#### **Swachh Bharat**

Contract to install an IOT based solution to capture real time feedback from community & public toilets in 12 states across India

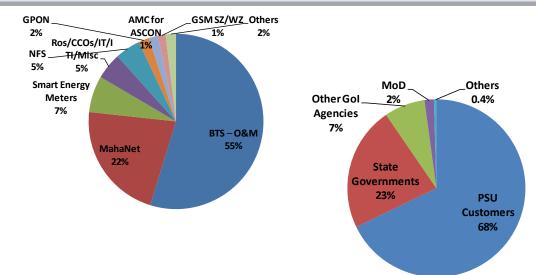
## Leveraging Gol's preferential market access policy

ITI benefits from Gol's preferential market access policy where indigenous manufacturers are given preference in procurement by Govt. agencies. Indian manufacturers with a defined value addition are given preference over foreign/domestic manufacturers not meeting the value addition requirement

# Strong order book comprising of a diversified suite of products and services across various sectors



		GPON
O/S- Aug 31, 2018	Rs Crs	2% Ros/CCC
BTS – O&M	6,633.6	NFS <del>TI/M</del> 5% 5%
MahaNet	2,658.3	Smart Energ
Smart Energy Meters	817.3	Meters 7%
Ros/CCOs/IT/ITI/Misc	592.6	778
NFS	566.5	
GPON	238.9	
AMC for ASCON	197.8	
GSM SZ/WZ	175.5	
Others	231.4	
Total	12,111.7	





**BTS O&M** – Purchase order for O&M of BTS for the GSM network of BSNL in Tamil Nadu, Uttar Pradesh and Uttarkhand for the next ten years. The scope of work includes O&M of passive infrastructure of BTS sites



**MahaNet** – MahaNet project in Maharashtra state includes laying of OFC cable, supply of access equipment and other related products as well as maintenance services.



Smart Energy Meters – ITI has a contract to manufacture & supply 2,500,000 smart energy meters for Energy Efficiency Services Ltd (EESL)



**NFS Project** – Contract with BSNL for laying optical fiber cable under the NFS project for the Indian defence forces in the Eastern and North-Eastern regions



**GPON Equipment** — Contracts from BSNL & BBNL for turnkey project to supply & install GPON equipment for Gol's flagship project "BharatNet". ITI has executed supply of OLTs, ONTs & solar power equipment which aims to provide high-speed broadband connectivity to over 250,000 villages (Gram Panchayats) in India. The existing order covers AMC of the supplied products



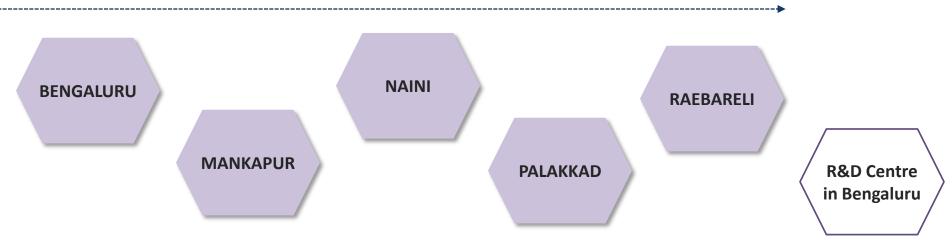
**AMC for ASCON** – AMC for maintaining the nodes, optical fiber cable & optical terminal & secrecy equipment for the MoD's ASCON Phase I, II and III projects.



**GSM SZ/WZ AMC** – Orders for AMC of GSM equipment previously supplied by ITI to BSNL south zone circles including Karnataka, Tamil Nadu, Kerala, Andhra Pradesh & Chennai



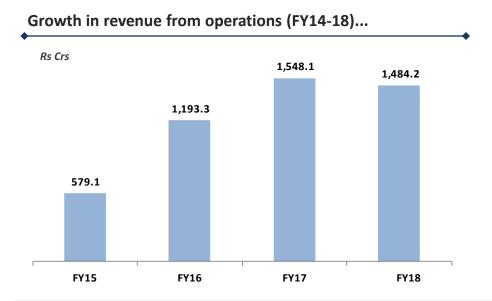
#### ITI'S MODERN MANUFACTURING FACILITIES

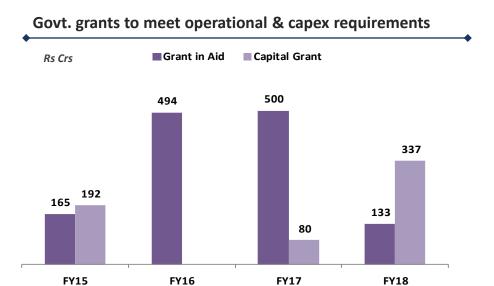


- ITI has upgraded and continues to modernize its manufacturing facilities, infrastructure, machines, equipment and technology which allows it to offer a diverse suit of products & services, reducing operating costs and drive productivity
- ITI in its bid to further diversify its manufacturing capabilities has added manufacturing of GPON products including optical line terminals (OLTs) and optical network terminals (ONTs), OFC and a high-density polyethylene (HDPE) manufacturing line to its Raebareli facilities. ITI has also established HDPE duct manufacturing lines at its Palakkad unit.
- In addition, the electronic manufacturing facilities at its Bengaluru, Raebareli, Palakkad and Mankapur plants have been upgraded to manufacture a diverse suite of products including other optical and data network products, defence security encryption, IoT amongst others –
  - √ smart energy meters
  - ✓ smart cards, solar panels
  - ✓ set-top boxes,
  - √ mini personal computers
  - √ 3D printing,
  - ✓ security surveillance products
  - ✓ radio modems and other allied product

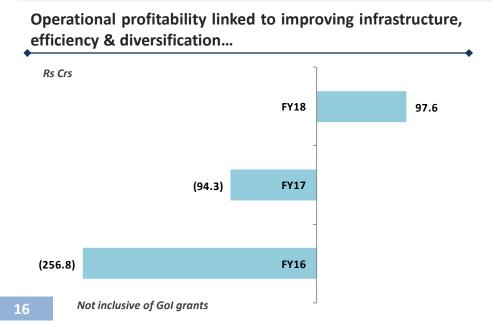
# Revitalized Company with improving financial performance

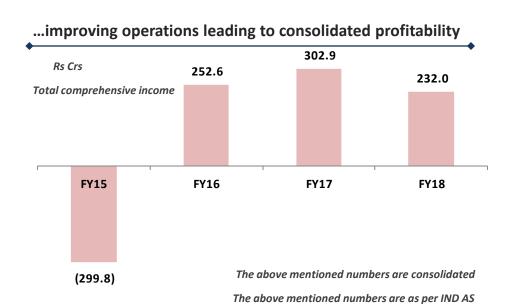






Telecom equipment manufacturer  $\rightarrow$  Telecom technology. ITI's strategy of diversification has helped it improve its financial performance







ITI's management team is well qualified & experienced in the industry . The combination of ITI's experienced board & management has been key in revitalizing the business & would also enable it to capitalize on further growth opportunities

Alagesan Kalingamuthu, Director Production with additional charge of Chairman & MD. He holds an engineering degree in production from University of Madras & a Diploma in Management & HR Management as well as an Advanced Diploma in Management from Indira Gandhi National Open University. Over 36 years of experience in production, marketing, billing & finance. Recipient of the Distinguished Alumnus Award by NIT, Tiruchirappali for excellence in corporate/ industry

**Chittaranjan Pradhan,** *Director with additional charge of Director* (*Finance*) He holds a bachelors and a masters degree in science, and a masters in philosophy from Sambalpur University. He has served over 20 years in the Indian P&T Accounts and Finance Service, Government of India. He has held the post of CCA, Tamil Nadu, Government of India

Rakesh Mohan Agarwal, Director (Marketing) with additional charge of Director (Human Resources). He holds a bachelors degree of engineering in electronics from Madan Mohan Malviya Engineering College, Gorakpur, a masters degree in electronics & communications engineering from University of Roorkee & a MBA from Indira Gandhi Open University. He has over 28 years of experience in policy formulation, standardization planning, O&M of telecom services & was previously the Government Nominee Director

**Saday Krishna Kanoria,** *Non-Official, Ind. Director (Non-Executive)*He holds a bachelors degree in commerce from Patna University. He has been a director of Manav Developers Private Limited since August 8, 1988 and Manav Constructions Private Limited since May 27, 1998. He is also partner in the firm, Marwari Awas Griha in Patna.

Rajesh Sharma, Government Director, Nominee (Non-Executive) He holds a bachelors of engineering in electronics from Devi Ahilya Vishwavidyalaya, Indore and a post graduate diploma in management from Management Development Institute, Gurgaon. He has been working with the Department of Telecommunications, Ministry of Communications for the last 28 years.

Asha Kumari Jaswal, Non-Official, Ind Director (Non-Executive)
She holds a bachelor of arts degree and masters degree in arts from
Punjab University. She has over 15 years of experience in the legal
profession and in the administrative field. She was the mayor of the
Municipal Corporation of Chandigarh and is currently also the
councillor of the Municipal Corporation of Chandigarh.

As at Aug 31, 2018, ITI has 3,427 employees, including more than 710 employees with technical and professional qualifications

# Experienced Board, management team and skilled workforce



Suresh Chandra Panda, Non-Official, Ind. Director (Non-Executive)
He holds a masters of arts degree in political science from Utkal
University, Orissa, a MBA in public services from University of
Birmingham, UK and a masters of arts in philosophy from Punjab
University. He has 39 years of experience as an I.P.S & I.A.S. Previously
worked with Prasar Bharati, as a Special Secretary & Financial Adviser
in the Ministry of Home Affairs, as a Development Commissioner of
the Noida Special Economic Zone and as a Director for the National
Commission for SC/STs.

**Dr. K. R. Shanmugam,** *Non-Official, Ind. Director (Non-Executive)*He holds a bachelors degree of arts in economics from the University of Madras, a masters degree of arts in economics from the Bharathiar University, a masters degree of philosophy in econometrics from the University of Madras and a doctor of philosophy in econometrics from the University of Madras. He has been working as a Director and Professor with the Madras School of Economics for over 23 years

**Dr. Akhilesh Charan Dube,** *Non-Official, Ind. Director (Non-Executive)* He holds a M.B.B.S degree from University of Jabalpur and a Master of Surgery in Othopedics from Devi Ahilya Vishwavidyalaya, Indore. He has previously worked as a Medical Officer with the Primary Health Center of the Birkony District in Chattisgarh.

Mayank Gupta, Non-Official, Ind. Director (Non-Executive)

He holds a bachelors degree in technology in electrical engineering from Gobind Ballabh Pant University of Agriculture and Technology. He has also, in the past, been the Director of Eurokids Schools, Roorkee, the President of The Nataraj Group and the President of the Yoganand Vikas Parishad

Rajen Vidyarthi, Non-Official, Ind. Director (Non-Executive)
He holds a bachelors degree in commerce from Rohilkhand University
and is a member with the Institute of Chartered Accountants of India.
He has been a partner of the chartered accountancy firm, R. Vidyarthi
& Co for the last 28 years





Continuously
diversify suite of
product and services
and leverage
relationships with
the GoI and PSUs

- ITI has been developing and introducing new products in collaboration with its technology partners including optical & data network products, defence security encryption, IoT products as well as other diversified products
- In addition, ITI offers a range of services including fiber laying services, data centre hosting solutions, AMC, contract manufacturing services and IT & software services.
- ITI plans to continuously upgrade & invest in technology, through acquisition of technology from strategic partners with a specific focus on high growth industry segments.
- The Company intends to continue to develop products & services with applications targeting customers across sectors such as telecommunications, defence, IT, banks, financial institutions & solar energy.
- ITI, currently implementing numerous GoI projects intends to continue to leverage its relationships with PSUs, MoD & other Government agencies to win large tenders & contracts which ITI believes that it shall benefit from economies of scale, to develop relationships with technology partners and to drive revenue growth.
- In addition, the company intends to leverage a new PSU synergy initiative by the DoT to utilize strengths of each PSU and for transfer of technology. ITI also holds regular interactions with stakeholders by conducting conferences.

Augment its manufacturing capabilities by upgrading and modernizing infrastructure and technology

- ITI has been upgrading its manufacturing facilities, infrastructure, machines, equipment, technology and employee skill sets that has allowed it to enhance its product offerings, reduce operating costs and drive productivity.
- ITI's capital expenditure plans include the following
  - upgrading of its electronic and mechanical manufacturing facility;
  - expanding its data centre operations by building a Tier 3 plus data centre with 1,000 racks space at Bengaluru;
  - setting up radio modem and smart energy meter manufacturing;
  - building electromagnetic compatibility & interference chambers for testing telecommunication & defence products;
  - expanding its defense encryption products and solutions capabilities;
  - setting up a solar panel manufacturing facility at Naini plant with 18MW capacity;
  - expanding smart card manufacturing; and
  - OFC and HDPE duct manufacturing



Teaming with innovative technology leaders and start-ups

- Continue executing teaming agreements, MoU & technology transfer (ToT) agreements with technology & telecom companies as well as start-ups for access to new technology & products to expand the Company's offering to customers as well as to drive efforts toward innovation.
- ITI has ToT agreements with various technology & telecom companies for certain technology & products including MLLN & OTN equipment, telecom & IT products such as GPON, Wi-Fi, terabit routers, fixed line & GSM technology
- ITI's teaming partners, include CDAC for IoT solutions; & Trimax Data Center Services Pvt Ltd for data centre services
- ITI intends to continue to build relationships across the communication & technology eco-system with institutions including system integrators, software & hardware companies & network service companies
- ITI believes that this knowledge of both products & the entire product development ethos helps to evolve a product
   & service development culture that is aligned with its customer requirements, employees & processes
- ITI also engages in discussions with its technology partners to bring opportunities to assist each other to grow and enrich respective understandings of the telecom technology industry & technical knowledge.
- ITI expects to continue to cultivate a cooperative R&D culture with its customers, technology partners & employees

■ In order to improve the Company's margins & profitability, ITI endeavors to continue to rationalize costs

- ITI's management strives to place great emphasis on cost control & improving operating efficiencies, especially in light of upgrading of its infrastructure, equipment & technology & its expanded product suite
- ITI intends to drive cost savings by teaming with technology partners through subcontracting & outsourcing; also looking to reduce its social overheads including medical costs, canteen subsidies & transportation expenses
- ITI plans to drive improved productivity per employee by its (i) modernized & upgraded infrastructure (ii) companywide emphasis on R&D and innovation (iii) continued training & improvement of its employees' skills & training
- ITI intends to monetize its land & property by finding additional & alternative uses, including by offering
  - vacant office space and factory hangers on rental basis to outside agencies
  - vacant sheds and RCC structures for warehousing/logistics purposes
  - the unused auditorium space in the Bengaluru plant for conducting functions or sporting purposes
  - unused community hall at Bengaluru plant for marriage purposes
  - convert existing hospital in Bengaluru manufacturing township into a multi/super specialty hospital
  - open spaces for sporting events, CNG/PNG station and distribution outlets

Reduce operating costs, increase operational efficiencies and improve productivity

# Summary Restated Consolidated IND AS Financials – Income Statement and Balance Sheet



Income Statement*				(INR Crs)	Balance Sheet*			(1	INR Crs)
Particulars (Rs Crs)	FY15	FY16	FY17	FY18	Particulars (Rs Crs)	FY15	FY16	FY17	FY18
Revenue from Operations	579.1	1,193.3	1,548.1	1,484.2	Equity	288.0	288.0	560.0	760.0
Otherstone	04.0	507.0	F 40. C	227.5	Reserves & Surplus	(2,198.5)	(1,925.1)	(1,808.6)	(1,434.0)
Other Income	84.9	597.0	540.6	327.5	Networth	(1,910.5)	(1,637.1)	(1,248.6)	(674.0)
Total Revenue	664.0	1,790.3	2,088.7	1,811.6	Long term borrowings	300.0	300.0	300.0	300.0
Cost of Material Consumed	43.0	41.3	92.6	313.4	Working Capital Loans	920.8	838.9	879.2	926.3
Cost of Material Consumed	45.0	41.3	92.0	313.4	Total Debt	1,220.8	1,138.9	1,179.2	1,226.3
Purchases of Stock in Trade	142.1	628.2	512.2	232.0	<b>Government Grants</b>	7.3	2.6	122.9	119.1
Changes in Inventories of FG, WIP	2.1	0.4	(17.6)	11.8	Fixed Assets (Net Block + CWIP)	96.0	195.7	259.6	429.8
& Stock in Trade	2.1	0.4	(17.0)	11.0					
					<b>Current Assets</b>	2,881.3	3,284.1	2,904.2	4,232.1
Installation & Maintenance	213.9	318.1	642.1	526.1	526.1 Inventories		103.8	142.3	155.9
Charges					Trade receivables	2,218.7	2,743.2	2,196.0	3,079.9
Employee Benefit Expenses	321.2	332.5	300.9	225.5	Cash and bank balances	45.8	50.0	24.4	41.3
Interest	157.3	157.2	152.6	153.4	Bank Balances	225.4	71.2	141.9	283.5
					Short term loans and advances	269.2	258.8	333.5	385.5
Depreciation	15.3	12.9	16.9	24.9	Unbilled Revenue	-	21.3	36.7	237.2
Other Expenses	67.2	62.5	122.7	94.0	Other current assets	28.8	35.7	29.5	48.8
					Current Liabilities	3,612.2	3,922.7	3,078.7	3,948.1
Total Expenses	962.0	1,553.1	1,822.3	1,581.1	Trade payables	2,283.0	2,105.3	1,976.0	2,261.6
РВТ	(298.0)	237.2	266.4	230.6	Other current liabilities	142.9	766.3	230.7	742.3
Tav					Short term provisions	352.5	241.9	148.4	120.1
Tax	-	-	-	-	Others	833.8	809.1	723.6	824.1
Total Comprehensive Income	(299.8)	252.6	302.9	232.0	Net Working Capital	(731.0)	(638.6)	(174.5)	284.0
						(10-10)	(555.6)	(=:)	



# **Annexure – Industry Section**

CRISIL Report — "Information & communication technology scenario in India"



#### Indian Telecom industry, still in the development stage, is expected to grow at CAGR of ~7-9% (FY17-23)

Telecom Subscriber Base	FY15	FY16	FY17	FY18	FY19 (P)	FY20 (P)	FY21 (P)	FY22 (P)	FY23 (P)
Wireless subscribers (mn)	970	1,034	1,170	1,183	1,204	1,228	1,250	1,278	1,308
Data subscribers (mn)	283	322	401	452	491	550	629	720	832
Data subscriber proportion	29%	31%	34%	38%	41%	45%	50%	56%	64%
2G and 3G data subscriber (mn)	283	314	269	177	131	102	79	61	47
2G and 3G data subscriber proportion	29%	30%	23%	15%	11%	8%	6%	5%	4%
4G data subscriber (mn)	1	8	131	275	360	448	550	659	785
4G data subscriber proportion	0%	1%	11%	23%	30%	36%	44%	52%	60%



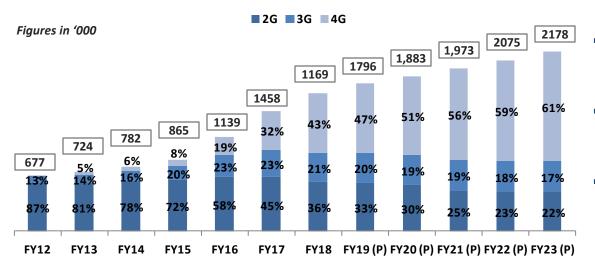


- Gol's initiatives, such as "Make in India" and "Digital India" have provided impetus for development of local manufacturing units and projects such as BharatNet & Smart Cities Mission have also boosted demand for telecom equipment
- lacktriangle With increase in the number of local manufacturers, dependence on imports will decline MNCs have set up units in India owing to the conducive environment for growth & development  $\Rightarrow$  driving growth in FDI thus leading to an influx of foreign technology
- Indian telecom sector will drive demand in the telecom equipment space → growth in the telecom equipment industry will be supported by long-term telecom industry growth and focus by telecom operators on improving service quality

## Information & Communication Technology Scenario in India – Wireless Access Network Products



## **Base Transceiver Stations (BTS)**

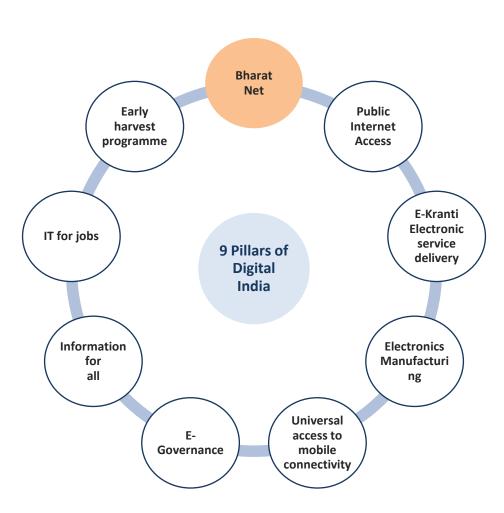


- Installed BTS ecosystem is set to undergo change in mix of 2G, 3G, & 4G BTS; overall BTS will grow at a 5-7% CAGR (FY18-23)
- Reduction in 2G BTS, as subscribers to migrate from 2G to 3G
   & 4G will be off set by growth in in 3G & 4G BTS
- Majority of demand for high-end 4G BTS & single-RAN BTS is fulfilled by imports. ITI manufactures low-power CDOT technology BTS at its manufacturing facility in Mankapur

# **Broadband Wireless Terminal (BBWT)**

- Primary reason for low-data pickup in India has been low mobile broadband speed, amongst the lowest in countries offering 4G services. In India,
  majority of data traffic flows through mobile networks that face congestion during peak hours, leading to poor mobile broadband experience
- Globally, 93% of the traffic flows through fixed broadband. This compares with approximately 89% in India, of which Wi-Fi caters to 35-40%
- On average, a global consumer spends over 45% of time on Wi-Fi internet, compared with 20% in India, most of this is at home; Indian consumers often do not access internet on Wi-Fi outside is due to lack of public Wi-Fi hotspots → there are about 38,000 Wi-Fi public hotspots in India
- Additionally, rural tele-density in India is 56.3%, compared with urban penetration of 163.4%, this tele-density gap along with need for higher number
  of public Wi-Fi hotspots indicates that there is great potential in rural & urban India for additional Wi-Fi penetration
- **New National Telecom Policy 2018** → enabling access to high-quality wireless broadband services at affordable prices to 90% of the population, developing 10 million public Wi-Fi hotspots in the country, and achieving 900 mn broadband connections. Under this policy, the number of Wi-Fi hotspots in India is set to increase significantly from 38,000 at present to approximately 500,000 over the medium term





#### **BharatNet Infrastructure Project**

- BharatNet is a key infrastructure project of the GoI, under which the GoI aims to connect 250,000 villages
- The infrastructure is designed primarily to provide for broadband internet in rural areas and remote regions of the country
- To execute BharatNet, GoI has set up a special purpose vehicle called BBNL, which is responsible for management and operation of the network
- Phase I → covered 100,000 gram panchayats, has been completed & was implemented by three PSUs: BSNL, RailTel Corporation of India and Power Grid Corporation of India
- Phase II → will cover the remaining 150,000 gram panchayats, was given a deadline of March 2019. The GoI has earmarked approximately Rs310 bn for Phase II, which a significant step-up from approximately Rs115 bn spent for Phase I
- In 2017, the Ministry of Communications announced plans to set up a minimum of one Wi-Fi hotspot per village. GoI has announced a viability gap funding of Rs36 bn to telecom operators for these Wi-Fi hotspots
- BharatNet infrastructure utilises GPON technology, which allows for point to multi-point connections. The GPON architecture utilises a variety of components, namely, optical fibre cable pipes, and optical fibre cables and terminals which transmit and receive information.
- **GPON Equipment for BBNL** → Of the Rs8 bn value of GPON equipment estimated for BharatNet, only 8% has been spent as of FY17. This leaves a room for higher investments in GPON in the short term, which will be driven by BharatNet

# Information & Communication Technology Scenario in India – Defence Communication Projects



#### **Army Static Switched Communication Network (ASCON)**

P	hase	Timeline	Awarded	Comments
I		1987 - 1991/92	ITI	Utilised mainly by the wireless radio technology
II		1995 - 1998	ITI	Utilised mainly by the optical fibre technology
II	I	2000 - 2006	ITI	Utilised asynchronous transfer mode & Integrated Services Digital Network technology along with a satellite overlay network
	V	2017 - 2021		Utilise a slew of new technologies based on IP/multiprotocol label switching technologies utilising IPv6-capable devices

- ITI is currently in negotiations for Phase IV
- ASCON, Phase IV, is a project with the MoD that entails the establishment of an optical fiber network for the Indian army
- Supply, installation, & maintenance of the optical fiber network & telecom equipment, mobile terminals, microwave towers, power supply equipment, test instruments etc
- The project is to be executed over a period of three years from the date of contract signing followed by 2 years of warranty support and 8 years of AMC support

#### **Network for Spectrum (NFS)**

- NFS is a strategic communications network project to develop and install an OFC network to be owned and operated by the defence services under the Project Implementation Core Group (PIGC) of the Ministry of Defence
- NFS involves establishing an exclusive OFC-based nationwide optical backbone for 414 defence sites & access networks at 219 army sites
- NFS project comprises all OFC routes, aggregating to 57,015 km, which is divided into seven packages. The NFS project, has been awarded to BSNL with an estimated cost Rs133.34 bn
- The implementation of this project is undertaken jointly by BSNL and PICG, whereby all essential project monitoring, installation, testing and acceptance will be carried out by joint teams.
- The GoI has allocated Rs30 bn for laying of OFC and procurement of equipment for the project in Fiscal 2018. ITI has an order for laying optical fiber cable amounting to ~Rs5.7bn under the NFS project for the Indian defence forces in the Eastern and North-Eastern regions

# Information & Communication Technology Scenario in India – Internet of Things (IoT)



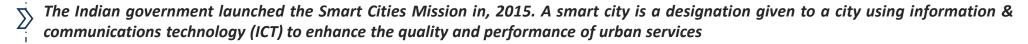


In 2015, as a part of the Digital India campaign, a centre of excellence for IoT was announced by the Ministry of Electronics & Information Technology



The Smart Cities Mission, which seeks to modernise cities with an emphasis on smart technologies, utilises IoT-based technologies

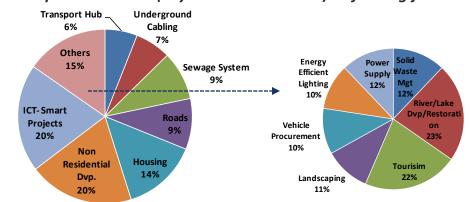
#### **Smart City Solutions**



Under the Smart Cities Mission, each selected city gets central assistance of Rs2 bn in the first year and Rs1 bn per year for the next three years, with a matching contribution from its respective state

It is expected that Rs1.2 tn (~60% of planned investment) will be spent by FY22. In Nov 2017, it is estimated that Rs60 bn of municipal bonds to be issued over the next three fiscals from progressive & proactive ULBs (city union-local bodies) as funding for various project





ICT, non-residential development & housing will account for more than 40% of planned investment in the Smart City Mission. The Gol primary focus is to enable local area development by using digital technology & ICT, which received approximately 15.7% of funds

Projects such as data visualization, intelligent traffic management systems, bus-fleet tracking & smart-parking systems, are also gaining importance → ITI is one of the key players providing smart-city solutions in India

# Information & Communication Technology Scenario in India – Electronic Products



### **Smart Energy Meters**



- Installation of smart meters has received support from the GoI only in recent years, through policies and programmes such as the National Tariff Policy, the Integrated Power Development Scheme, the Ujwal Discom Assurance Yojana & smart grid pilot projects
- Ministry of Power (MoP) Several policy initiatives to promote smart metering  $\rightarrow$  In 2012, the MoP sanctioned 14 projects for smart grids, with 50% funding to be provided by GoI  $\rightarrow$  172,000 smart meters have been sanctioned  $\rightarrow$  over 57,368 smart meters have been installed
- Ujwal Discom Assurance Yojana (UDAY), 2015
  - Target to install smart meters for consumers with a monthly consumption of more than 500 units by December 31, 2017
  - As of Feb '18, ~2.9% of the targeted 5.01 mn meters had been installed for consumers with consumption more than 500 kWh/month
  - For consumers in the 200-500 kWh category, the achievement was only 0.97% of the target of 17.45 mn smart meters
  - Indicating that there is a large potential for the smart meter market
- Energy Efficiency Services Ltd (EESL) Installing smart meters through the Smart Meter National Programme (SMNP) to reduce discoms' billing inefficiencies. The SMNP aims to replace 250 million conventional meters with smart meters.
  - EESL launched a mega tender to procure 5 mn smart meters in July 2017 on behalf of the Uttar Pradesh and Haryana Discoms for implementing smart-grid projects in these states. The smart meters are planned to be installed over three years
  - ITI has a contract to manufacture and supply 2,500,000 smart energy meters to EESL
- Private Initiatives by Other DISCOMS—
  - Tata Power Delhi Distribution Ltd announced that it would roll out 250,000 smart meters for its customers
  - Calcutta Electric Supply Corporation Ltd The rollout of smart meters will cover over 180,000 consumers across the service area

#### **Aadhar Cards**



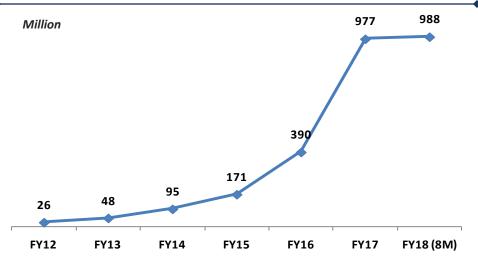
- Aadhaar has grown to be the world's largest biometric ID system, with over 1.2 bn enrolled members as of April 2018
- In FY19, UIDAI (statutory authority for Aadhar) has been provided a 15% higher budget allocation of funds at Rs13.75 bn, viz-a-viz Rs12 bn in FY18. These funds are expected to be used for technology upgradation & strengthening overall capacity
- ITI has ventured into providing Aadhaar-based authentication services based on the SaaS model to address various segments

# Information & Communication Technology Scenario in India – Electronic Products

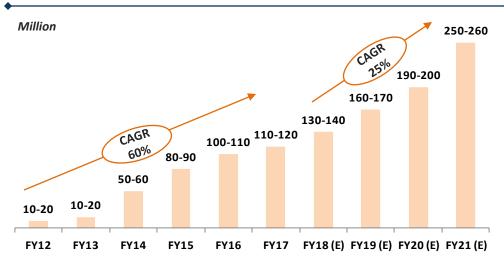


#### **Digital Wallets**

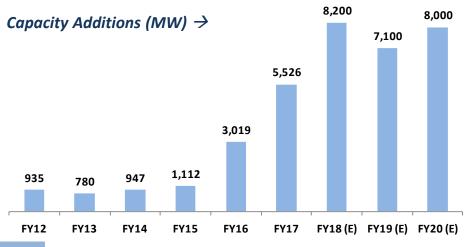




Growing smart phone sales serving as key enabling driver for mobile wallets



#### **Solar Panels**



- Solar PV capacity addition of 23-24 GW over FY18-20 to be driven by additions under
  - National Solar Mission Phase II Batch II, III, IV, V and VI,
  - Capacities tendered by Discoms in various states, including Karnataka, Telangana, AP, Punjab, MP, Jharkhand & Tamil Nadu & rooftop projects
- ITI Ltd produces solar panels in its manufacturing facility in Naini, Uttar Pradesh. It has upgraded the capacity of the unit to 18 MW. It also received a contract for establishment of 14 MW solar plant

## Information & Communication Technology Scenario in India – Electronic Products & Data Centre

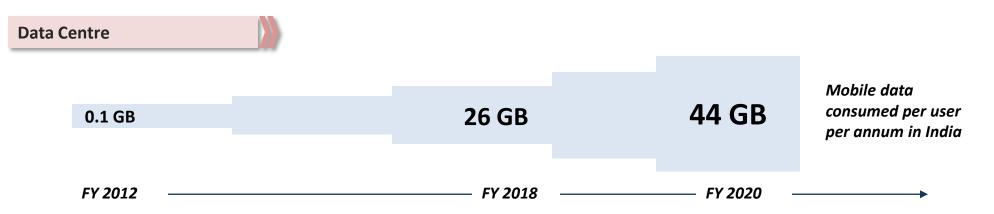


#### **Smart Cards**

• As subscriber identity module (SIM) cards are a key enabler for wireless telecom. India currently has the 2<sup>nd</sup> largest wireless telecom subscriber base in the world with over 1.16 bn subscribers as of end of Dec 2017. the number of wireless subscribers to grow at a 2% CAGR, from an estimated 1.18 bn at the end of FY18 to 1.3 bn by the end of FY23

# Set-Top Boxes (STB)

- STB market size at Rs280 bn in FY18 and is expected to grow at a CAGR of ~9% between FY18 and FY23
- SD STBs account for more than 90% of the total market in India; however, with the increasing penetration of HDTVs, subscribers are increasingly replacing their STBs with HD STBs → The move to HD STB coupled with increasing TV penetration, will drive growth in STBs



■ India has also seen data volumes growing → ITI has been offering data centre hosting services since 2009. Its existing capacity of 350 racks is now being expanded with 1,000 rack space at Bengaluru