

Broadband Readiness Index

March 2nd, 2020

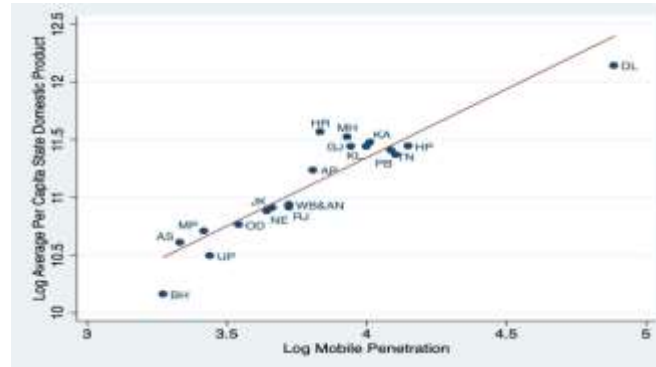


Broadband Readiness Index: Objective and Outcomes

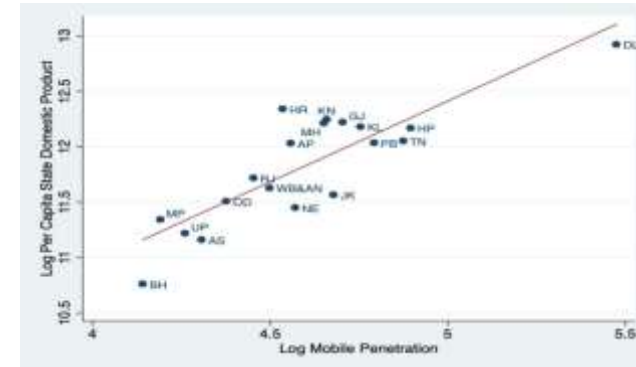
- The National Digital Communication Policy (NDCP) 2018 recommends a Broadband Readiness Index for States/ UTs as a tool for states to attract investments and address Right of Way (RoW) challenges
- DoT has engaged ICRIER to undertake this exercise on an annual basis (2019-2022) for the systematic evaluation of state-performance, on metrics set out as the goals under the NDCP
- Such an exercise will provide useful insights into strategic choices made by states to optimize policy and the consequent investment allocations in ICT programmes
- The framework will not only evaluate a state's relative development but will also allow for better understanding of a state's strengths and weaknesses that can feed into evidence-based policy making

Changing nature and magnitude of the economic impact of telecom infrastructure

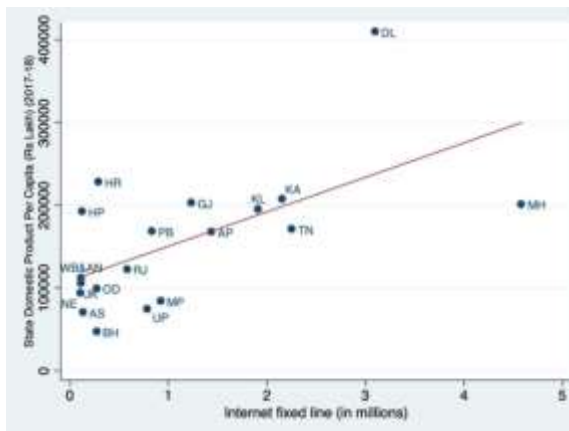
Correlation between State GDP Per capita and Mobile Penetration (Average for 2010-11 to 2017-18)



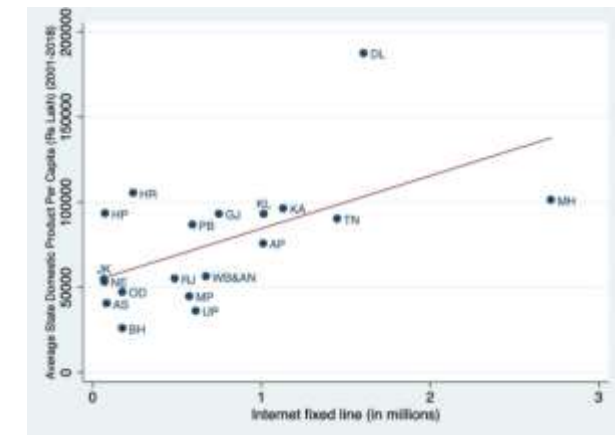
Correlation between State GDP Per capita and Mobile Penetration (2017-18)



Correlation between State GDP Per capita and Fixed Internet Subscribers (2017-18)



Correlation between State GDP Per capita and Fixed Internet Subscribers (Average for 2010-11 to 2017-18)



IMPACT OF DIGITAL COMMUNICATION

MOBILE PENETRATION (2001-2018)

A 10 % increase in mobile penetration increases output by 1.9 %

INTERNET SUBSCRIBER (2001-2018)

A 10 % increase in internet subscribers increases states GDP per capita by 3.2 %

INTERNET AND MOBILE TRAFFIC (2013-2018)

A 10% increase in mobile and internet traffic delivers on an average 1.6 % and 3.1 % increase in GDP per capita respectively.

INVESTMENT IN TELECOMMUNICATION (2010-2018)

A 10% increase in investment in telecom will increase India's GDP by 3.3 %.

Motivating State Competition and State Co-Operation

- State performance is not uniform in terms of ICT penetration, adoption and policy implementation
- The Broadband Readiness Index will enable state competition and state co-operation in improving the overall digitization of the country :
 - ❖ Rankings are a good instrument to advertise, market and promote a state's image. The rankings will therefore function as an incentive to attract the attention of the domestic and global community to bring more investment, technology and talent.
 - ❖ Laggard states get an opportunity to learn from the best performing ones and also set performance and policy benchmarks
 - ❖ Inputs from territorial and functional units help with strategic choices to plan investments made in government ICT programmes and processes

Broadband Readiness Index: Structure

The Broadband Readiness Index (2019) consists of two parts :

- Part I will focus on infrastructure development based on the measurement of nine parameters. These are discussed in the next slide.
- Part II consists of demand side parameters which will be measured, but may not be included in the estimation of the Broadband Readiness Index. It will include indicators such as percentage of households using computers/ laptops with internet connection, percentage of households with fixed broadband connection, internet users as a percentage of the population, smart phones density, percentage of households with at least one digitally literate member, etc. These parameters will be measured through a primary survey conducted by Kantar IMRB.

Broadband Readiness Index: Part I

Measurement Parameters

- The measurement parameters focus on capturing
 - Existence of policies enabling infrastructure development (*de jure* status)
 - Implementation of existing policies (*de facto* status)
 - Development of communications infrastructure
 - Availability of supporting infrastructure

Broadband Readiness Index: Part I

Measurement Parameters

Category	Sample Questions
Existence of policies enabling infrastructure development (<i>de jure</i> status)	<ul style="list-style-type: none"> • Does the state have a policy on Right of Way (RoW)? (based on Department of Telecommunications (DoT) RoW Rules 2016) • Has the state adopted the National Building Code 2016? • Does the state have a common duct "Dig Once Policy" ?
Implementation of existing policies (<i>de facto</i> status)	<ul style="list-style-type: none"> • Please provide the number of RoW applications cleared by the state for towers in the last one year beginning April 1, 2018 (with complete documentation) • Does the state have provisions for making Government lands and buildings available for installation of telecom towers? • Please provide the number of RoW applications cleared by the state for optical fibre cable (OFC) in the last one year beginning April 1, 2018 (with complete documentation)
Development of communications infrastructure	<ul style="list-style-type: none"> • What percentage of mobile towers in the state are connected by fibre? • Please provide the number of mobile towers in the state • Please provide the percentage of public hospitals and primary healthcare centers in the state connected by fibre
Availability of supporting infrastructure	<ul style="list-style-type: none"> • Does the state have a standardized Request for Proposal (RFP) template available for smart city implementation ? • Please provide the percentage of districts in the state receiving priority electricity connection for your telecom infrastructure on preferential tariffs for commercial or industrial use • Please provide the percentage of state villages receiving priority electricity connection for your telecom infrastructure at commercial or industrial rates

Outcomes of BRI (2020)

Collaborative effort by DoT, ICRIER and Industry Associations will help us deliver BRI 2020. The outcomes of BRI will include :

- Developing a state-level Broadband Readiness Index ranking states focused on RoW policies and the creation of fibre infrastructure, among others (Data as on December 2019)
- Identifying common issues hindering rollout of telecom infrastructure – multiple policies, absence of single window clearance, multiple fees/ levies, non-availability of power, locational restrictions, etc.
- Identifying state-level digitisation programs and their effectiveness
- Identifying and evaluating best practices that can be adopted by other states
- Analysing and reporting state-wise demand side parameters – number of mobile phone users, smart phone users, etc.

Status update on Data Collection for States in the East and North East Region

- A data collection template has been circulated to the states. There are 30 questions in all (Most discussed above). Responses from a state will only be visible to ICRIER.
- We are verifying data that has already been submitted by states
- For states who haven't submitted any responses or submitted partial responses, the deadline for data submission in March 6th

States / UTs	Complete Data Received	Partial Data Received	No Data Received
Arunachal Pradesh		x	
Assam		x	
Manipur			x
Meghalaya		x	
Mizoram		x	
Nagaland	x		
Tripura		x	
West Bengal			x
Bihar		x	
Jharkhand	x		
Odisha			x
Sikkim			x

Thank You!

Contact Us

Mansi Kedia - mkedia@icrier.res.in
Richa Sekhani- rsekhani@icrier.res.in
Chavi Asrani : casrani@icrier.res.in