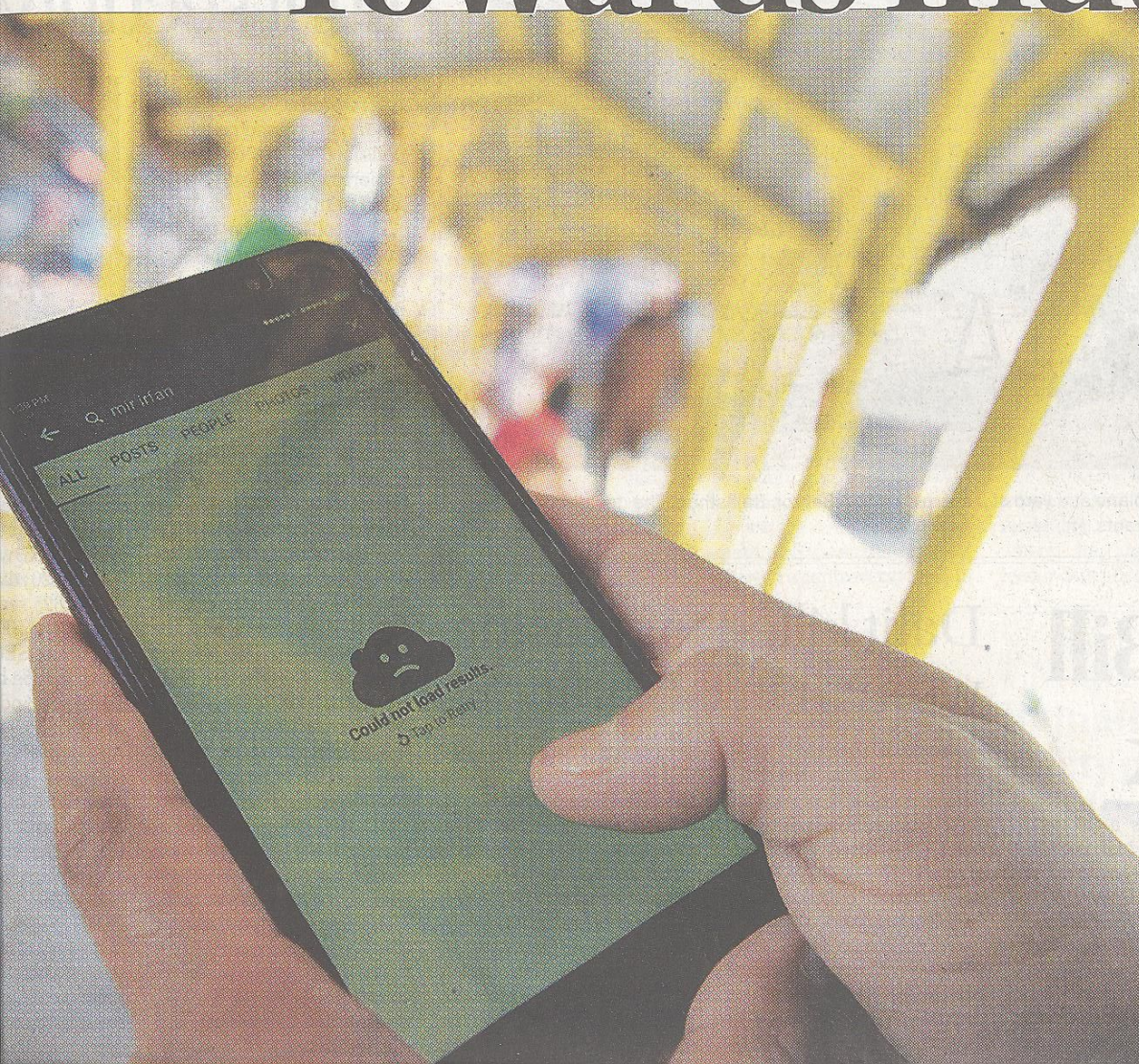


# Towards Industry 4.0





Accelerators like regulatory frameworks and physical infrastructure will create stronger partnerships between the government and the industry. It will place India at the top position of the Fourth Industrial Revolution, says Chandrajit Banerjee

**D**IGITALISATION is a way of life. India with its population of 1.3 billion is emerging as a global player in the area of telecommunications. As technologies rapidly unfurl in the form of artificial intelligence, big data, virtual reality, and other exciting new formats, Indians are embracing digital technology and the size of its market is expanding at the fastest pace in the world.

The Draft National Digital Communications Policy-2018 (NDCP), which has been recently unveiled to invite inputs from stakeholders, is a forward-looking document that aims at leveraging the strength of the Indian digital economy for empowering citizens, driving economic growth, unleashing entrepreneurship and investments and creating jobs. The policy will help the country become future-ready and strengthen our position in the global digital economy.

Today, India has more than a billion mobile phone connections and 500 million internet users. Social media, e-commerce, remote provision of services such as education and healthcare, and delivery of government programmes are some of the ways that Indians are deploying online platforms. Financial technologies or fintech, has unfolded at great speed with people across the country now operating bank accounts and making payments through mobile phones. India has one of the highest mobile data usage profiles in the world. The NDCP estimates that our digital economy could reach \$1 trillion by 2025.

Digitalisation of India depends crucially on adequate capacity to deploy the right connectivity. Industry seeks favorable policy frameworks to elicit investments. This can be encouraged by reducing the costs of rolling out fibre networks, where the reuse and sharing of physical infrastructure that supports digital net-

works has an important role to play. India pioneered the concept of passive infrastructure sharing globally. Innovative models for partnership and fibre infrastructure sharing for broadband are emerging as well. The draft NDCP-2018 talks about reforming licensing and regulatory regime to catalyse investments and innovation, and promoting ease of doing business.

The government has already proactively taken multiple initiatives to encourage the digital economy, which pervades all aspects of the economy. BharatNet is an ambitious project to connect six lakh villages through broadband. Programmes such as Smart City and Start-up India have set the right foundations for technology-based development. NDCP represents a huge step towards embedding broadband in the fabric of India's digital economy. Promoting accelerators such as regulatory frameworks and physical infrastructure will create stronger partnerships of government and industry and enable India to emerge as a leader for the rapidly unfolding Fourth Industrial Revolution.

The government proposes to introduce a fibre-first initiative in the draft policy, which would emphasise fibre both for fixed broadband for homes and enterprises and next-generation mobile technology for moving towards 4G and 5G. Further, telecom infrastructure is to be recognised as critical and essential infrastructure on par with other connectivity infrastructure such as roads and railways. This will greatly encourage development of digital highways through low-cost financing availability.

The draft NDCP-2018 thus accords priority to broadband, to be built up through the universal service obligation fund (USOF) and public-private partnership. BharatNet is slated to provide 1 gigabytes per second (gbps) speed to gram panchayats which can be further upgraded to 10 gbps. GramNet would connect rural

development institutions with a facility of 10 mbps, to be raised to 100 mbps later. NagarNet aims to set up 1 million public Wi-Fi hotspots in urban areas while JanWi-Fi would establish 2 million such hotspots in rural areas.

Further, the policy recognises the need for creating a fund for R&D which would enable startups to develop advanced communications, 5G, software, content security and related technologies and applications. The fund would also aim to facilitate commercialisation of products and services by providing seed capital as well as grants and scholarships to deserving innovators.

A major objective of the policy is to create 4 million additional jobs in the digital communication space. While new job opportunities will be directly created, indirect jobs too could come up to support millions of livelihoods.

Through the new policy, India will also be able to deploy its market and human talent to reach out to the world. It specifically mentions expanding India's contribution to global value chains and taking India to the top 50 rank in the ICT Development Index of ITU from a position of 134 in 2017.

The draft policy is thus a comprehensive and timely endeavour to accelerate digital adoption in the country. As it points out, advanced communication facilities and services and applications riding on digital infrastructure stand at the core of GDP growth, productivity enhancement and job creation. Competitive forces lead to better products, lower costs and wider choice for consumers. For investors, the regulatory compliances should be simple, transparent and accountable. The proposed new communications policy could be the next big game changer for taking India into a bright and exciting future.

— *The writer is the Director General of the Confederation of Indian Industry*

## THE NEW AGE BLUEPRINT

The government unveiled a Draft National Digital Communications Policy-2018, earlier this month to create an ecosystem that would develop a vibrant and competitive telecom market in India.

### Key objectives

- Broadband for all by 2022
- Creation of 40 lakh additional jobs
- Raise GDP contribution from 6% to 8%
- Take India to top 50 nations in ICT Development Index

### Three missions

#### Connect India:

- Broadband coverage at 50 mbps to every citizen
- 1 gbps connectivity to all gram panchayats by 2020; 10 gbps by 2022
- Fixed line broadband access to 50% of households
- Unique mobile subscriber density of 55 by 2020; 65 by 2022
- 5 million public Wi-Fi hotspots by 2020; 10 million by 2022

#### Propel India:

- Attract investments of \$100 billion
- Creation of innovation-led startups
- Train 1 million manpower in new age skills
- Expand IoT ecosystem to 5 billion connected devices
- Accelerate fourth industrial revolution