The Union Cabinet has approved the new telecom policy now named National Digital Communications Policy (NDCP) 2018 and also re-designation of the Telecom Commission as the “Digital Communications Commission”.

The new National Digital Communications Policy -2018 will replace the existing National Telecom Policy-2012, to cater to the modern technological advancements such as 5G, IoT, M2M etc. in the Telecom Sector.

Machine-to-machine, or M2M, is a broad label that can be used to describe any technology that enables networked devices to exchange information and perform actions without the manual assistance of humans.

The Internet of Things (IoT) is a seamlessly connected network system of embedded objects/devices, in which communication without any human intervention is possible using standard and interoperable communication protocols. E.g.: An IoT-enabled air conditioning system can report whether its air filter is clean and functioning properly.

Need for National Digital Communications Policy

- **Having significant capabilities in both telecommunications and software**, India stands poised to benefit from harnessing new digital technologies and platforms to unlock productivity, as well as to reach unserved and underserved markets; thus catalysing economic growth and development, generating new-age jobs and livelihoods, and ensuring access to next generation services for its citizens.

- India’s demographic profiles **vary widely** across various indices such as literacy, economic conditions and urbanisation. It is important to promote policies that increase opportunities for their social and economic development. Accordingly, this policy aims for universal coverage rather than revenue maximization.
• The rapid and unprecedented proliferation of the mobile phone, the internet, social media platforms, and the rapid expansion of digital payments, data consumption and generation across India indicate that the data economy and digital technologies and services are widespread instruments of access and empowerment for more than a billion Indian.
• It has been broadly estimated that a 10% increase in broadband penetration in a country could potentially lead to an over 1% increase in GDP. Therefore, a consistent policy and principles framework is required to create a vibrant competitive telecom market to strengthen India’s long term competitiveness.
• In order to expand mobile and broadband connectivity across the country, it is necessary to explore and utilise the opportunities presented by next generation-networks like 5G and satellite communications.
• As the world prepares for the fourth industrial revolution, India needs to be readied to embrace this opportunity through the convergence of a cluster of revolutionary technologies including 5G, the cloud, IOT and data analytics.
• India needs to promote and protect fair competition across the communications and digital economy sector.
• Given the sector’s capital-intensive nature, the Policy aims to attract long-term, high quality and sustainable investments by ensuring that the regulatory structures and processes remain relevant, transparent, accountable and forward-looking.
• Additionally, the Policy aims to remove regulatory barriers and reduce the regulatory burden that hampers investments, innovation and consumer interest. The Policy also identifies steps to strengthen the sector’s institutional mechanism and legislative framework.

Features of National Digital Communications Policy
It envisages three Missions:

1. **Connect India**: Creating Robust Digital Communications Infrastructure.
   1. **National Broadband Mission (Rashtriya Broadband Abhiyan)**- Provide **Universal** broadband connectivity at 50Mbps to every citizen by 2022.
   2. **BharatNet**- Provide 1 Gbps connectivity to all **Gram Panchayats** of India by 2020 and 10 Gbps by 2022.
   3. **GramNet** – Connecting all **key rural development institutions** with 10 Mbps upgradeable to 100 Mbps.
   4. **NagarNet** – Establishing 1 Million public **Wi-Fi Hotspots** in urban areas.
   5. **JanWiFi** – Establishing 2 Million **Wi-Fi Hotspots** in rural areas.
   6. Enable **100 Mbps broadband on demand** to all key development institutions including all educational institutions by 2022.
   7. **Fibre First Initiative** to take fibre to the home, to enterprises and to key development institutions in Tier I, II and III towns and to rural clusters.
   8. Establishment of a **National Digital Grid** by **National Fibre Authority**.
   9. Strengthening **Satellite Communication** Technologies in India by reviewing SATCOM policy, making available new spectrum bands, streamlining administrative processes for assignment and allocations, clearances and permissions related to satellite communication systems, etc.
   10. Ensuring Customer Satisfaction, Quality of Service and effective Grievance Redressal by establishing **Telecom Ombudsman**, framing a comprehensive policy to encourage the adoption of **environmental and safety standards** and incentivising the use of **renewable energy technologies** in the communications sector.

2. **Propel India**: Enabling Next Generation Technologies and Services through Investments, Innovation and IPR generation.
   1. Attract **investments of USD 100 Billion** in the Digital Communications Sector, expand **IoT ecosystem** to 5 Billion connected devices, accelerate transition to Industry 4.0 by 2022.
   2. Creation of innovation led Start-ups in Digital Communications sector.
   3. Creation of **Globally recognized IPRs (Intellectual Property Rights)** in India.
   4. Development of Standard Essential Patents (SEPs) in the field of digital communication technologies.
   5. **Train/ Re-skill** 1 Million manpower for building New Age Skills.

1. Establish a comprehensive **data protection regime** for digital communications that safeguards the privacy, autonomy and choice of individuals and facilitates India's effective participation in the global digital economy.

2. Ensure that **net neutrality principles** are upheld and aligned with service requirements, bandwidth availability and network capabilities including next generation access technologies.

3. Develop and deploy **robust digital communication network** security frameworks.

4. Build capacity for **security testing** and establish appropriate security standards.

5. Address security issues relating to encryption and security clearances.

6. Enforce accountability through appropriate institutional mechanisms to assure citizens of safe and secure digital communications infrastructure and services.