Panel for Roll Out of 5G Services by 2020

The nine-member Steering Committee, headed by Stanford University Professor AJ Paulraj, submitted the report, **Making India 5G Ready**, to the telecom secretary.

- Committee suggested that Government should announce its 5G policy by December 31, 2018 and 5G services should be made operational in country by 2020.

Key Recommendations of Committee

- Spectrum Policy
    - India's spectrum allocation should be enhanced significantly on various frontiers to realize digital infrastructure as a core utility under Digital India.
    - The cost of spectrum relative to per-capita GDP is high and it is important that India builds a more favourable spectrum policy in the 5G era.
- Regulatory policy
    - Regulatory policy support for deployment of mobile networks is critical for its success due to its close linkages with the physical, financial and security infrastructure of the country.
- Education and Awareness Promotion Program
    - Given the economic potential of 5G. It is important to promote awareness of 5G and advance the related skills development within the country.
    - The Committee recommended three initiatives - Attract global 5G conference events to India, set up national 5G events and create a comprehensive skills development program.
- Applications and Use Case Labs
    - Deeper and faster deployment of 5g in India can greatly benefit from the setting up of Applications and Use Case Labs.
    - These labs will provide multiple functions – interoperability testing for new applications, fostering innovation in 5G use cases, and promote entrepreneurship to develop locally tailored solutions.
- Development of Information Technology Standards
    - With the advent of 5G and its rich applications potential, many fresh requirements will arise.
    - India is in its initial years of engagement in the global standards ecosystem. 5G offers a new opportunity to engage in the standards process. The Committee recommends both short term and longer term initiatives to develop a ten year strategy for Information Technology Standards.
- Participation in International Standards
    - The Committee recommended short term initiatives like setting up 'Standards Project Teams' with funding enabling consistent participation to participate in standards activities.
    - For the longer term, the Committee recommended that an expert committee be constituted to recommend a ten year strategy for Information Technology Standards in India.
- Technology Demonstration and Major Trials
    - The Committee recommended that the major global Original Equipment Manufacturers should be invited to conduct major 5G trials in India in collaboration with local partners.

Positive Impact of 5G on Indian Economy

- 5G services would have a cumulative economic impact of over $1 trillion by 2035.
- By early deployment of 5G services, India can accelerate the dividends and can also become an innovator.
- As per the OECD Committee on Digital Economic Policy, 5G technologies will help in:
    - Increasing GDP
    - Creating Employment
    - Digitizing the economy

What is 5G?

- The 5G standards envisage various types of wireless services -
    - High speed links with peak rates of 2 to 20 Gbps,
    - Low speed links but with high connection density (one million per Sq. Km.) for sensing and actuating devices (IoT),
    - Low latency (the response time after tapping the screen or pressing a key)
    - High connection reliability (link outage of 0.99999).

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