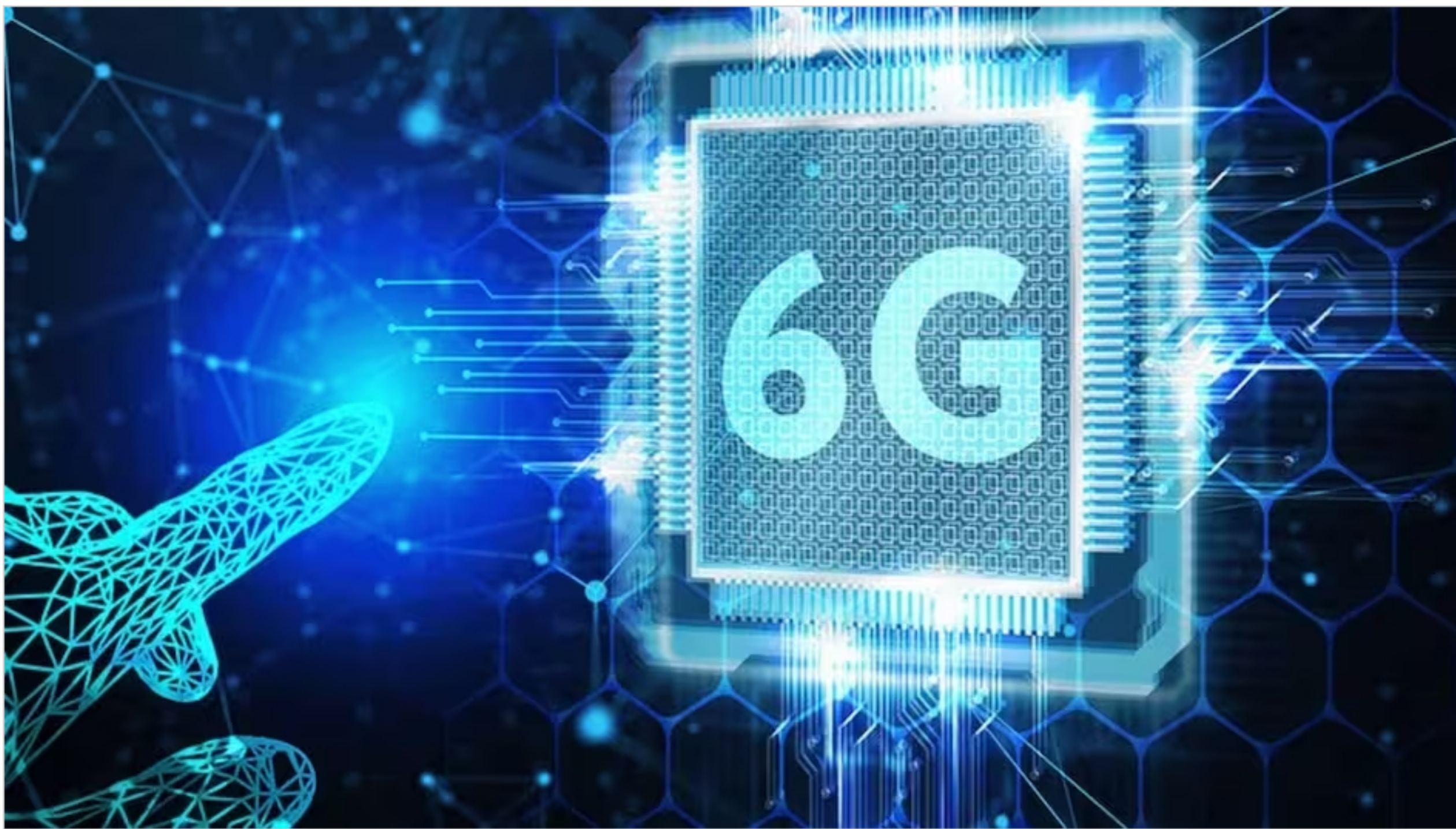


# 5G/6G, SatCom and Semiconductors to add \$240 billion to India’s economy in the next 5 years

These three technologies are collectively expected to contribute an additional 1.6 per cent to India's GDP by FY28

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India will have to move up the value chain to enhance domestic value addition in ICT manufacturing

**SUMMARY**

- ▶ India followed the world in 4G, marched with the world in 5G and now aims to lead the world in 6G
- ▶ 5G/6G, SatCom and Semiconductors are estimated to contribute an additional ~1.6 per cent to the national GDP by FY28
- ▶ India will have to move up the value chain to enhance domestic value addition in ICT manufacturing

As India is looking to become the third largest economy in the world in the coming years, cutting-edge technologies across 5G/6G, satellite communication (SatCom) and semiconductors will contribute towards this growth. These three technologies are collectively expected to add approximately \$240 billion to the nation’s economy in the next five years and are estimated to contribute an additional around 1.6 per cent to the national GDP by FY28. The findings were released by KPMG in India in association with the India Mobile Congress (IMC) 2023.

India has demonstrated its prowess in mobile manufacturing, but it will have to move up the value chain to enhance the domestic value addition in information and communications technology manufacturing. The country needs to transition from an assembly-only approach in electronics to a holistic, integrated, end-to-end manufacturing-led approach. Through backward integration, Indian companies need to develop niches that will help the country move beyond assembly operations. Until such capabilities are built, the government should focus on getting the lowest-cost component manufacturers to set up operations in India.

Yezdi Nagporewalla, CEO, KPMG in India, said, “The digital economy in India is on an exponential growth trajectory, powered by the continuous evolution of the information and communications technology (ICT) manufacturing sector. India's forward-looking 6G vision document has positioned its digital prowess at the forefront of global technology. Furthermore, India’s population dividend and technological progress give it a tremendous advantage and can help the country achieve its goal of becoming a dependable global digital leader with cooperative action on digital literacy, cybersecurity, new technologies, and export promotion.”

The report suggests key recommendations for India’s telecom future with 5G stating that an effective partner ecosystem can help communication service providers (CSPs) better support their customers’ growing needs with more comprehensive solutions utilising 5G and other advanced technologies. There is also a need to formulate regulations and administrative processes in the context of digital connectivity infrastructure development (DCIP).

The role of infrastructure providers must adapt to meet the evolving needs of 5G, encompassing elements like fibre capacity, optical transport, tower count, 5G repeaters, edge sites, small cells, and DAS for indoor and outdoor solutions. Lastly, the deployment of 5G technology will require a highly skilled workforce capable of managing and maintaining the complex network infrastructure.

The report “Expanding tech horizons: Unlocking India’s digital potential”, also states that India followed the world in 4G, marched with the world in 5G and now aims to lead the world in 6G. And to accelerate the 6G revolution, India should continue investing in research and development activities to contribute to the advancement of 6G technology, strengthen the global knowledge base, and help shape the future of this technology.

The report also recognises the potential in the semiconductor space, stating the government is working aggressively to enable India to be at the centre of the global semiconductor supply chain and is offering some of the most attractive incentives globally. In total, India is offering \$30 billion in support for semiconductors and related industries.