

India Joins International 6G Initiative

Prelims: Current events of national and international importance | Science & Technology

Why in News?

Recently, India joined the United States and 24 other countries in an international initiative to shape the development of 6G networks, following the G20 Innovation Ministerial Meeting.

- **International 6G Initiative** - The initiative aims to ensure that future telecommunications networks will:
 - Reflect collective **security interests**
 - Enhance **technological competitiveness**
 - Foster **innovation**
- This development occurs in the context of increasing **India-US cooperation** in the following areas:
 - **Sixth-generation (6G) wireless technology**
 - Semiconductor technology
 - Artificial Intelligence (AI)
 - Data center infrastructure
 - Emerging technologies



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Knowledge for a Brighter Tomorrow

**FASTER
SMARTER
MORE CONNECTED**

5G vs 6G

FROM CONNECTIVITY TO A SMARTER TOMORROW

Next Generation for a Smarter Bharat

**BEYOND
CONNECTIVITY
INTELLIGENT
INCLUSIVE
SUSTAINABLE**

Feature	5G	6G
 Generation	Fifth	Sixth
 Status	Commercially deployed	Under development
 Main focus	High speed, low latency, connectivity	Advanced connectivity, AI integration, sensing etc.
 Latency	Very low	Expected to be even lower
 Applications	IoT, autonomous systems, enhanced mobile broadband	Immersive communication, advanced sensing, AI-native applications
 Standards	Established through international standardisation	Still evolving







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- **Advantages**

- Improved access to global technology ecosystems
- Active participation in international standard-setting processes
- Enhanced collaboration in research and development initiatives
- Strengthening the security of telecommunications networks
- Development of a robust semiconductor ecosystem
- Expanded opportunities for Indian technology enterprises
- Reduced reliance on individual foreign technology suppliers

G20 Innovation Ministerial Meeting

- **Representatives from** - G20 member countries to discuss innovation and the advancement of emerging technologies.
- **Took place in** - Chapel Hill, North Carolina, United States.
- **Concluded with** - The adoption of the **G20 Innovation Ministerial Statement**.
- The statement emphasised the following key areas:
 - Emerging technologies
 - Prosperity
 - Productivity
 - Innovation
 - Economic opportunities
 - Quality of life

Reference

[News on Air | India Joins International 6G Initiative](#)



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