

Ethical 6G: Identifying Elements of Ethical Framework for 6G and Creating Opportunities for India and Australia

Background and Context

Increasing technological penetration has resulted in increased cyberthreats affecting consumers, industry and governments globally. Further, cyberspace is now being considered a zone of modern warfare and several countries such as the United States (US), United Kingdom (UK), China, have started developing their cyber warfare capabilities.¹ This signifies the criticality of cyber security for national security.

In this context, it is important for governments to build secure and resilient cyberspace and Information and Communication Technology (ICT) systems. Today, many countries are deploying the 5th Generation (5G) telecommunication technology. Movements in the 6G development have begun. While these technologies can significantly transform and positively impact society by enabling Enhanced Mobile Broadband (EMBB), Massive Machine-Type Communications (MMTC), and Ultra-Reliable and Low-Latency Communications, they also increase the surface area of potential cyber security threats.

Further, development of 6G is concentrated in a few leading countries such as USA, China, Japan, Finland and Norway, among others.² These countries seem to be disproportionately shaping international discourse on the issue. Democratic countries in the Indo-Pacific region like India, Australia and others may benefit from jointly working towards becoming forebearers in the advancement of 6G technology. Moving fast in this direction may also help these countries to become prominent voices in standard-making process for 6G.

Development and deployment of 6G technology may bring in unanticipated challenges, in addition to cybersecurity such as threats to *privacy, trust, consumer protection, competition and inclusion*, among others. Hence, development of 6G should be accompanied with developing an *ethical framework* which encapsulates these aspects. This will be critical from the perspective of creating an open, secure, free, rules-based cyberspace.

Recently, India and Australia have agreed to increase bilateral cooperation in the digital economy, including cyber governance, cyber security, and cyber and critical technologies, focusing on capacity building and innovation. The India-Australia partnership has a common objective to develop an open, secure, peaceful, and interoperable cyberspace and technologies that adhere to the basic tenets of international law.³ This project is being undertaken under the Australia-India Cyber and Critical Technology Partnership (AICCTP).

Project Objectives

- To identify possible areas of cooperation and collaboration between India and Australia on developing and deployment of 6G telecommunication technology;
- To contribute to the global policy discourse towards achieving an open, secure, free, rules-based cyberspace in the Indo-Pacific region through an India-Australia partnership;
- To strengthen understanding of ethical framework for development and deployment of 6G technology;
- To create an enabling environment in India and Australia for their contributions to the 6G standard making process; and

Partnership with


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Research Agenda and Components

- Research Component 1: Understanding the What, Why, When, and How of 6G: An Indo-Australian Perspective;
- Research Component 2: Understanding Strategic Issues and Opportunities in the Indo-Pacific for India and Australia of 6G Technology Development;
- Research Component 3: Understanding Standard Making Process for 6G; and
- Research Component 4: Identifying Elements of an Ethical Framework for 6G.

Approach and Methodology

CUTS will follow a three-pronged approach of research, advocacy and networking as the methodology for the project.

- **Research:** The project will involve secondary research (literature review and analysis) and primary research (multi-stakeholder consultations, key informant interviews, expert consultations, etc.) in India and Australia.
- **Advocacy:** Based on research findings, physical and online events would be organised with participation from Indian-Australian government representatives, regulators, experts, policymakers, civil society organisations, intergovernmental organisations, standard bodies associations, market players, etc.

- **Networking:** The project will also endeavour to engage with research organisations in India and Australia, to help gather research inputs and amplify research outputs.

Project Outputs

Four research reports, one linked to each of the research components, will be prepared. Op-eds, and policy briefs based on the research findings will be written and widely disseminated via e-forums and social media.

Envisaged Outcomes

The study will create an understanding of potential ways and areas of institutional collaboration between Indian and Australian governments, businesses and academia, with respect to development and deployment of 6G technology. It will provide an ethical framework for development of deployment of 6G technology which can be used for creating a secure cyberspace in the Indo-Pacific region.

Project Duration

12 Months (July 2022 - June 2023)

Endnotes

- 1 Who are the cyberwar superpowers? World Economic Forum, available at: <https://www.weforum.org/agenda/2016/05/who-are-the-cyberwar-superpowers/>
- 2 5 nations: the race to build 6G, Technology Magazine, available at: <https://technologymagazine.com/data-and-data-analytics/5-nations-race-build-6g>
- 3 Joint Statement on The Inaugural India-Australia Foreign Ministers' Cyber Framework Dialogue; available at: <https://www.mea.gov.in/bilateral-documents.htm?dtl/34860/>

