

5. Google-India Ai Connect- Science & Technology

Google Announces \$15 Billion 'America-India Connect' Subsea Cable Initiative at India AI Summit

At the India AI Impact Summit, Google announced a massive \$15 billion investment over five years to fortify India's digital infrastructure. The centerpiece is the America-India Connect initiative, a collaborative project designed to transform India into a global hub for subsea connectivity and high-performance computing.

1. The America-India Connect Initiative

This infrastructure project aims to link India directly with the U.S. and the Southern Hemisphere through high-capacity fiber-optic networks.

Vizag International Gateway-

1. Establishment of a new international subsea gateway in Visakhapatnam (Vizag).
2. Development of a gigawatt-scale compute facility to support advanced AI processing.

Subsea Connectivity Paths-

1. Three new paths- Linking India to Singapore, South Africa, and Australia.
1. Four strategic routes- Connecting the U.S., India, and the Southern Hemisphere via fiber optics.

Impact- The infrastructure addresses the surging demand for cloud computing and AI services in India while providing faster, cheaper internet to boost national productivity.

2. AI Research, Skilling, and Public Service Pledges

Beyond physical hardware, the investment focuses on "Frontier AI" for scientific and social advancement.

Category	Initiative & Funding	Target Group/Impact
Public Services	\$30 Million pledge	Improving government services and public utility efficiency using AI.
Scientific Research	\$30 Million pledge	Funding for local scientific breakthroughs and high-end research.
Google DeepMind	Frontier AI for Science	Partnership with the Indian government to deploy advanced models for local scientific challenges.
Professional Skilling	Google AI Professional Certificate	Students and early-career professionals entering the AI workforce.
Governance Training	Partnership with iGOT Karma Yogi	Aiming to train 20 million public servants in digital and AI skills.
School Level	Atal Tinkering Labs (ATL)	Generative AI support for 10,000 ATLs, reaching 11 million students.

3. Understanding Undersea (Submarine) Cables

Definition- Fiber-optic strands encased in heavy padding (a few inches thick) laid on the seafloor to connect global internet networks.

Function- They connect local Internet Service Providers (ISPs) and telecom operators to global data hubs.

The 90/80 Rule- Undersea cables carry 90% of global data and facilitate 80% of world trade, including critical financial and government transactions.

4. India's Submarine Cable Landscape

India is strategically positioned as a landing point for major international data traffic.

Feature	Details
Primary Hubs	Mumbai and Chennai.
Existing Infrastructure	17 international cable systems currently land in India.
Domestic Projects	CANI Cable- (Chennai-Andaman & Nicobar Islands) for high-speed island connectivity.

	Kochi-Lakshadweep Islands Project- Bringing high-speed data to the Arabian Sea islands.
New Hub	Vizag (introduced via the America-India Connect initiative).

5. Global Governance and Resilience

As data traffic increases and environmental threats grow, international bodies have stepped up to protect this "invisible" infrastructure.

International Advisory Body for Submarine Cable Resilience (2024)-

1. Launched jointly by the International Telecommunication Union (ITU) and the ICPC.
2. Mandate- Provide strategic guidance to address aging infrastructure, rising traffic, and security threats.

International Cable Protection Committee (ICPC)-

1. Founded- 1958.
2. Role- A global forum representing over 60 countries and commercial entities.
3. Mission- Enhancing the security of undersea cables by exchanging technical, legal, and environmental information to prevent damage (e.g., from anchors or seismic activity).

6. Significance for India

The expansion of subsea capacity acts as a digital multiplier. By establishing paths to Africa, Australia, and Southeast Asia, India reduces its reliance on traditional routes through Europe and the Middle East, enhancing digital sovereignty and ensuring the scalability of its domestic AI and cloud sectors.

Source- <https://www.newsonair.gov.in/google-announces-15-billion-america-india-connect-subsea-cable-initiative-at-india-ai-summit/>

