

India's Strategic Data Infrastructure

The India-UAE plan to offshore sovereign data and its impact on data storage and management costs for businesses in India

India and the UAE are exploring the creation of mutual "data embassies" as part of a broader digital infrastructure and technology partnership announced during the state visit of HH Sheikh Mohamed bin Zayed Al Nahyan to India in January 2026.

The initiative forms part of a large-scale bilateral collaboration involving approximately 8 exaflops of compute capacity and nearly 2 GW of dedicated data center infrastructure. The partnership signals a significant strategic shift in how nations may manage sovereign digital infrastructure, critical data assets, and cross-border digital resilience in the coming decade.

The proposed framework is expected to influence the future of cloud infrastructure, data localization strategies, sovereign computing, cybersecurity systems, and the economics of data storage and compute capacity in India.

What is a data embassy?

A data embassy is a relatively new concept in digital governance where a country's critical digital infrastructure, databases, cloud systems, and strategic information assets are hosted in another country under predefined sovereign compliance and policy frameworks.

The structure functions similarly to a physical diplomatic mission, but for digital infrastructure. Even though the physical servers and storage systems may be located in a foreign geography, the originating nation retains sovereign control over the data, governance protocols, and operational access.

The primary objective of a data embassy is continuity and resilience. In the event of a catastrophic disruption such as cyber warfare, geopolitical conflict, natural disasters, infrastructure failure, or systemic outages within the home country, critical government and institutional systems can continue operating from offshore infrastructure.

In practical terms, a data embassy acts as an extension of a nation's digital infrastructure in another geography, enabling continuity of governance systems, secure access to strategic information, and uninterrupted digital operations during emergencies.

The India-UAE collaboration therefore represents not merely a commercial data center partnership, but a strategic digital sovereignty initiative with long-term geopolitical and economic implications.

May 2026

Executive summary

India and the UAE's proposed sovereign data embassy partnership marks a major shift in global digital infrastructure strategy. Combined with rising AI-driven compute demand and India's expanding subsea connectivity ecosystem, the initiative is expected to strengthen India's position as a global data hub while increasing long-term demand and costs for cloud infrastructure services.

Research and Analysis

Amish R. Shah
amish@ascentcts.com

Demand surge for storage and compute infrastructure

The broader India-UAE technology partnership targets approximately 8 exaflops of compute capacity alongside a planned 2 GW data center build-out.

Feasibility studies are expected to conclude by mid-2026, potentially paving the way for project groundbreaking in early 2027, with Phase 1 operations targeted for 2028.

The scale of the proposed infrastructure is enormous and will require substantial investments across data center construction, cloud infrastructure, power systems, networking, cooling technologies, and cybersecurity frameworks.

Tier-4 AI-ready data centers currently cost approximately US\$ 11.3 mn per MW to construct. Simultaneously, the global supply chain for advanced sovereign compute infrastructure remains constrained. High-performance GPUs, AI accelerators, liquid cooling systems, and associated hardware continue to experience significant procurement delays, with lead times extending up to 18 months in several cases.

The creation of sovereign-grade offshore data infrastructure is expected to generate substantial additional demand for: (a) Data centers and hyperscale infrastructure, (b) Cloud storage systems, (c) AI compute infrastructure, (d) Cross-border cybersecurity systems, (e) Data governance and compliance solutions, (f) Disaster recovery and redundancy frameworks, (g) High-capacity networking infrastructure

As sovereign governments increasingly seek resilient and geopolitically trusted digital infrastructure partners, India may emerge as a preferred destination for both sovereign and enterprise-grade data hosting.

India's international internet connectivity and strategic positioning

India's international internet connectivity is heavily dependent on undersea fibre-optic cable systems, which carry more than 95% of the country's global internet and data traffic.

A significant proportion of this traffic enters India through approximately 17 active subsea cable systems concentrated around landing stations in Mumbai and Chennai. More than 60% of India's internet traffic routes through critical West Asian maritime chokepoints, including the Red Sea and Suez Canal corridors, before reaching Europe and the Americas.

This infrastructure has increasingly become a strategic geopolitical asset.

China has aggressively expanded its ambitions in the global fibre-optic communications ecosystem as part of broader initiatives such as the Digital Silk Road, Belt and Road Initiative, Made in China 2025, and China Standards 2035. Through acquisitions and infrastructure expansion, including the acquisition of UK's Global Marine which later became associated with Huawei Marine Networks, China has strengthened its position in undersea cable infrastructure, maintenance, repair, and network modernization capabilities.

In many ways, the strategic importance of secure digital connectivity now mirrors the importance of secure maritime trade routes.

Just as global commerce depends on the secure passage of merchant vessels through critical maritime chokepoints such as the Strait of Hormuz, global digital economies increasingly depend on secure and resilient subsea cable infrastructure for uninterrupted data transmission.

Recognizing these risks, India has already taken strategic positions in at least eight new cable systems commissioned since 2023, many of which transit through Indian territory or landing infrastructure.

This growing connectivity footprint positions India as an increasingly important regional hub for: (a) Sovereign data hosting, (b) Cross-border cloud infrastructure, (c) International data transit, (d) AI compute infrastructure, (e) Disaster recovery systems, (f) Enterprise-grade secure storage infrastructure

India's geographic positioning further strengthens this advantage, offering connectivity access across East Asia, Southeast Asia, West Asia, and Africa.

Impact on businesses and cloud infrastructure costs in India

The emergence of India as a trusted sovereign data and compute destination is expected to have significant implications over the next 24 to 36 months for businesses operating in India.

Several structural factors are likely to contribute to sustained increases in demand for data storage and compute infrastructure:

1. India's position as a strong and stable democracy enhances its credibility as a reliable custodian of sovereign and enterprise-sensitive data.
2. India's geographic location provides strategic connectivity access to multiple high-growth regions including East Asia, Southeast Asia, West Asia, and Africa.
3. Continued investments in subsea cable infrastructure and international internet connectivity strengthen India's role as a regional digital infrastructure hub.
4. Global AI adoption is creating unprecedented demand for high-performance compute infrastructure, cloud capacity, and storage systems.
5. Supply constraints in GPUs, AI hardware, power infrastructure, and advanced data center systems continue to limit rapid capacity expansion.

As a result, demand for cloud infrastructure services in India, including servers, hosting infrastructure, AI compute capacity, storage systems, and enterprise cloud services, is expected to rise substantially over the medium term.

This may lead to:

- Higher cloud infrastructure and hosting costs for businesses
- Increased competition for AI-ready compute infrastructure
- Longer procurement timelines for enterprise-scale deployments
- Greater adoption of hybrid cloud and multi-cloud strategies
- Increased focus on data governance and cybersecurity compliance
- Higher investments in redundancy and disaster recovery systems

For Indian businesses - particularly those operating in technology, financial services, AI, manufacturing, healthcare, logistics, and digital commerce - infrastructure planning and cloud cost optimization may become increasingly important strategic priorities over the next few years.

Disclaimer

This document has been prepared by ASCENT FUTURETECH LLP solely for the use of the intended recipient and is not meant for public circulation, distribution, or reproduction, whether in whole or in part, without prior written consent.

The information contained in this report has been compiled from internal assessments, publicly available sources, industry reports, and other sources believed to be reliable. However, ASCENT FUTURETECH LLP does not represent or warrant the accuracy, completeness, adequacy, or reliability of the information, estimates, opinions, or projections contained herein.

This report is intended purely for informational and discussion purposes and should not be construed as legal, financial, investment, tax, regulatory, or strategic advice. The contents of this document should not be relied upon for making investment, commercial, operational, or policy decisions without undertaking independent evaluation and obtaining appropriate professional advice.

Certain statements contained in this report may include forward-looking observations, projections, estimates, or expectations based on current industry trends, assumptions, and market conditions. Actual outcomes may differ materially due to changes in technology, regulations, geopolitics, market dynamics, infrastructure availability, or other external factors.

ASCENT FUTURETECH LLP, its affiliates, partners, employees, associates, or representatives shall not be held liable for any direct or indirect loss, damage, or consequence arising from the use of, reliance upon, or interpretation of this report or any information contained herein.

The references to companies, technologies, infrastructure projects, countries, or strategic initiatives in this report are for illustrative and analytical purposes only and do not constitute endorsements, recommendations, or affiliations unless explicitly stated otherwise.

Readers are advised to conduct their own independent analysis and verification before acting upon any information contained in this document.