



UPSC & STATE PCS CURRENT AFFAIRS · UJIYARI.COM

MAGAZINE NOTES

Cyber Security and Digital Trust

1 April 2026 ·

SECURITY & DEFENCE

SCIENCE & TECH

GS3

CURATED & WRITTEN BY

**Bharat Choudhary**

UPSC Educator & Content Creator

[in linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

ALSO FROM THE CREATOR

BharatNotesFree UPSC notes, MCQs, PYQ analysis. **100% Free.**bharatnotes.com →

ADVERTISE

Advertise with Ujiyari

Reach thousands of UPSC aspirants daily.

[✉ epicbharat@gmail.com](mailto:epicbharat@gmail.com)

Cyber Security and Digital Trust

■ **Yojana** Chapter 2 2 min read ·

Published: Yojana, April 2026

As welfare delivery, payments and identity move onto digital rails, the issue argues that **digital trust is now a public good**, and cybersecurity its supply chain. The chapter builds a layered model of where that trust can break.

THE SIX-LAYER SECURITY ARCHITECTURE

LAYER	EXAMPLES OF RISK
Material / communication	Undersea cables, spectrum
Hardware	Chip-level backdoors, counterfeit components
OS / network	Unpatched systems, protocol exploits
Application	Malware, API abuse
Task / functional	Process manipulation, insider misuse
Human	Phishing, social engineering: 85 percent of incidents involve human error

The weakest layer is human, which is why awareness programmes sit alongside technical hardening in the national strategy.

WHY THE ATTACK SURFACE IS EXPANDING

- **BRAIN convergence** (Biotechnology + Robotics + AI + Nanotechnology) multiplies entry points faster than defences mature, in a VUCA threat environment
- **95 percent of India's international internet traffic** flows through undersea cables (roughly 400 submarine cables exist globally), a chokepoint largely outside national control
- India ranked **3rd globally in ransomware attacks** (Check Point Research 2024)
- 30,000+ tracked space debris objects threaten the satellite layer that communications depend on

INSTITUTIONAL RESPONSE

- **CERT-In:** mandatory reporting of cyber incidents within **6 hours** (rule in force since April 2022)

- **NCIIPC** protects Critical Information Infrastructure under **Section 70A, IT Act 2000** (sectors: power, banking, telecom, transport, government)
- **I4C** under the Ministry of Home Affairs coordinates cybercrime response
- Policy lineage: National Cyber Security Policy 2013; National Cyber Security Strategy 2020

CASE STUDIES THE ISSUE USES

- **AIIMS Delhi ransomware (November 2022)**: around 5 crore patient records affected; the wake-up call for health-sector CII
- **Colonial Pipeline (2021) and Ukraine grid attacks (2015-16)**: energy infrastructure as target
- **SolarWinds (2020)**: supply-chain compromise that triggered the US Zero Trust mandate, the model now shaping Indian government architecture

MAINS ANGLE

Critical analysis: India's framework remains reactive (post-incident reporting) rather than preventive (mandatory security-by-design); the 2013 policy predates the UPI-era attack surface. **Way forward:** a statutory national cybersecurity authority, sectoral CERTs with real audit powers, and treating undersea cable resilience as strategic infrastructure.

★ FACTS CORNER — KNOWLEDGEPEDIA

NUMBERS:

85 percent of cyber incidents involve human error

95 percent of India's international data traffic rides undersea cables; ~400 cables globally

India: 3rd globally in ransomware attacks (Check Point Research 2024)

INSTITUTIONS AND RULES:

CERT-In: 6-hour incident reporting (since April 2022)

NCIIPC: CII protection under Section 70A, IT Act 2000

I4C: cybercrime coordination under MHA

CASE STUDIES:

AIIMS Delhi ransomware (Nov 2022, ~5 crore records); SolarWinds (2020) led to US Zero Trust mandate

Sources: Yojana / Publications Division , CERT-In



CURATED & WRITTEN BY

Bharat Choudhary

UPSC Educator & Content Creator

[in linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)[Read Full Article on Ujiyari →](#)<https://ujiyari.com/magazines/2026/yojana-april-2026/cyber-security-digital-trust/>

ALSO FROM THE CREATOR

BharatNotes

Free UPSC study platform — subject-wise notes across all 4 GS papers, Prelims MCQs, Mains answer frameworks, PYQ analysis & progress tracking. **100% Free • No Login Required.**

[Start Preparing → bharatnotes.com](https://bharatnotes.com)

📌 OPPORTUNITY

Advertise with Ujiyari

Reach **thousands of serious UPSC & State PCS aspirants** daily through our PDFs, website, and social channels.

Ideal for: Coaching institutes • EdTech platforms • Book publishers • Exam prep apps

[✉ epicbharat@gmail.com](mailto:epicbharat@gmail.com)

Write to us for rates & media kit

Free UPSC & State PCS Current Affairs · ujiyari.com · bharatnotes.com