

1. Computer Emergency Response Team (CERT-In) cybersecurity directions for VPNs.

Topic: Governance



In News: The Indian Computer Emergency Response Team (CERT-In) has extended the deadline for VPNs to comply with its cybersecurity directions.

More on the Topic:

- The directions issued by CERT-In require service providers to maintain **logs of all information and communication technologies (ICT) system for a period of 180 days.**
- VPN providers will need to **store validated customer names, their physical addresses, email ids, phone numbers, and the reason they are using the service.**
- VPN providers have to **keep a record of the IP and email addresses** that the customer uses to register the service, along with the timestamp of registration.
- They also have to **register and maintain personal information of subscribers** for five years or longer and provide this data to CERT-In if demanded in case of a cybersecurity incident.
- Virtual asset, exchange, and wallet providers will also have to keep records on KYC and financial transactions for a period of five years.
- All government and private agencies, including internet service providers, social media platforms, data centres, etc., have to **mandatorily report cybersecurity breach incidents to it within 6 hours of noticing them.**

Who are Virtual Private Network? Providers?

- **VPN is an encrypted connection over the Internet from a device to a network that helps users hide their browsing history, internet protocol –IP address, and geographical location, as well as their web activities and the devices being used.**
- A private network that is virtually created when you surf the Web. Every time you switch on your VPN connection, a secure channel is created, which acts as an intermediary between your device and the destination webpage. Your data is then sent to an external VPN server, which then connects you to your destination.

- However, when the VPN server does this, your IP address, which is the online equivalent of a user-specific postal code, is changed — and thus websites are unable to accurately track your location.

About CERT-IN:

- The Indian Computer Emergency Response Team is an office within the **Ministry of Electronics and Information Technology of the Government of India.**
- It is the nodal agency to deal with cyber security threats like hacking and phishing. It strengthens security-related defence of the Indian Internet domain.
- The Information Technology (Amendment) Act 2008 designated CERT-In to serve as the national agency to perform the following functions in the area of cyber security.

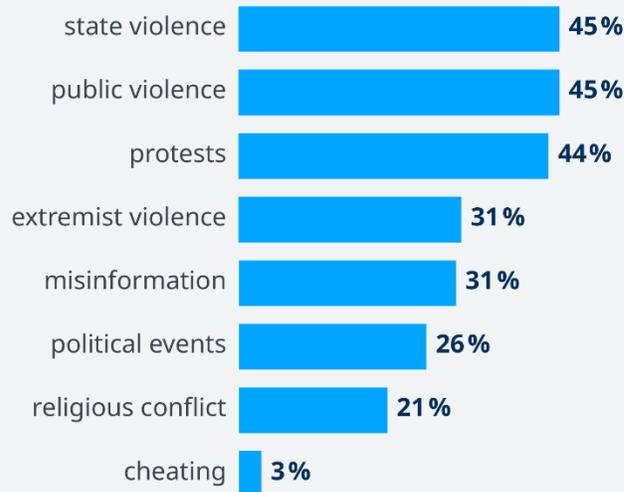
Source: Indian Express

2. Internet shutdowns

Topic: Science and Technology/ Governance

Violence is the most common backdrop to internet shutdowns in India

Reasons cited for internet shutdowns



Source: SFLC.in data from 2012 to 2019 | DW analysis, for details on methodology see github.com/dw-data/internetshutdowns

In News: United Nations-backed report has flagged that the effect of internet shutdowns have far reaching effects on the lives of millions.

More on the Topic:

- **Excerpts from the Report:**



- Internet shutdowns are measures taken by a government or on behalf of a government, to intentionally disrupt access to and the use of information and communications systems online.
- As many as 12 countries implemented more than 10 shutdowns during that period.
- Shutdowns affected at least 52 elections in the period.

Location of the Shutdowns:

- Globally, all regions have experienced multiple shutdowns, but the majority reported occurred in Asia and Africa.
- India blocked or disrupted internet connections 106 times and at least 85 of India's internet shutdown episodes were in Jammu & Kashmir.

Impacts of the Shut Downs:

- Almost half of all shutdowns recorded by civil society groups from 2016-2021 were carried out **in the context of protests and political crisis**, with 225 shutdowns recorded during public demonstrations relating to a vast range of social, political or economic grievances.
- Disruptions severely inhibit the work of journalists and the media in general, a key element of fair democracy.
- **Shutdowns affected at least 52 elections in the period.** Such disruptions undermine or eliminate access to digital tools that are critical for campaigning, promoting public discussion, conducting voting and overseeing the electoral processes.
- Internet shutdowns also carry **major economic costs for all sectors**, disrupting financial transactions, commerce and industry.
- The episodes **undermine learning outcomes and interfere with education planning and communication** among teachers, school administrators and families.

Way Ahead:

- States should refrain from imposing shutdowns, to maximize Internet access and remove the multiple obstacles standing in the way of communication.
- The report urges companies **to speedily share information on disruptions** and ensure that they take all possible lawful measures to prevent shutdowns they have been asked to implement.
- **Internet bans should be used as a last resort and must be enforced following well-formulated protocols.**
- **Emergency response and relief systems for the vulnerable should be planned in advance before enforcing internet shutdowns.**
- Swift action is needed to end Internet shutdowns, including through more prominent reporting of their impacts, more transparency by involved companies.

Rules Related to Internet Shutdowns:

- Suspension of telecom services (including internet shutdowns) is governed by the Temporary Suspension of Telecom Services (Public Emergency & Public Safety)

Rules, 2017, notified under the Indian Telegraph Act, 1885.

- The 2017 Rules provide for temporary shutdown of telecom services in a region on grounds of public emergency (up to 15 days at once).

Source: The Hindu

3. European Union Commission

Topic: International Relations



In News: Prime Minister Narendra Modi met European Commission President during G7 summit.

More on the Topic:

- The European Commission (EC) is the executive body of the European Union (EU).
- It's mandates involve proposing legislation, implementing decisions, upholding the EU treaties and managing the day-to-day business of the EU.

India and the European Union:

- India and the European Union are eyeing to firm up the comprehensive trade and

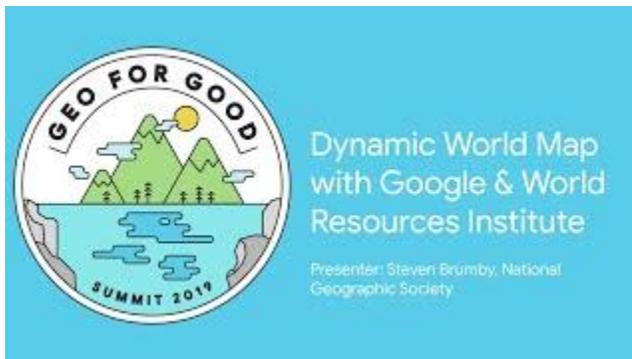
investment agreements before the commencement of the electoral cycles on both sides in 2024.

- The EU is one of the largest investors in India, accounting for 16 per cent of total investments received between 2015-20.
- India and the European Union have been negotiating a free trade deal, but it is pending since 2007.

Source: Hindu

4. Google Dynamic World

Topic: Science and Technology



In News: Google has recently launched a new service called Dynamic World that offers near real-time land cover data around the world.

More on the Topic:

- This tool uses AI and cloud computing to classify whether a pixel (which is equivalent to 1,100 square feet of land) of satellite imagery contains water, flooded vegetation, built-up areas, trees, crops, bare ground, grass or ice.
- Google has mentioned that Dynamic World is using the **Copernicus Sentinel-2 satellite** to take images.

Significance of the Tool:

- Google's Dynamic World helps in **tracking how the planet changes in response to various natural and human activities** that include -- fires, floods, deforestation and even urban development.
- Tracking the planet's response can be **crucial for creating solutions**.

- This information can also help scientists and policymakers **to monitor and understand land and ecosystems** which will eventually help them to make more accurate predictions and effective plans to protect the planet from future disasters.

Source: Indian Express

5. Lunar Reconnaissance Orbiter

Topic: Science and Technology



In News: NASA's Lunar Reconnaissance Orbiter has spotted Rocket Impact Site on Moon.

More on the Topic:

- Surprisingly the crater is actually two craters.
- The double crater was unexpected and may indicate that the rocket body had large masses at each end.
- The Lunar Reconnaissance Orbiter is a NASA robotic spacecraft currently orbiting the Moon in an eccentric polar mapping orbit.
- Data collected by LRO have been described as essential for planning NASA's future human and robotic missions to the Moon.

Source: Business Standard

6. GOAL 2.0

Topic: Government Schemes



जनजातीय कार्य मंत्रालय MINISTRY OF TRIBAL AFFAIRS GOVERNMENT OF INDIA

In News: Social media giant Meta and Ministry of Tribal Affairs has announced to extend their collaboration to launch the second phase of Going Online As Leaders (GOAL) programme.

More on the Topic:

- The first phase of GOAL has seen changing the lives of tribal youth through the digital mentorship programme.
- In the second phase, The ministry will reach out to 10 lakh women and youth entrepreneurs and will also create a platform for more than 50,000 self-help groups and 10 lakh families associated with TRIFED to take their products global.
- GOAL 2.0 will look to digitally upskill, connect and empower 10 lakh youth and women from the tribal communities of the country.
- It aims to serve as a bridge for the socially marginalised youth to leverage opportunities using technology.
- Tribal population constitutes about 8.6% of the total population in India.

Source: Hindu

7. Permafrost Preserved Baby Mammoth

Topic: Environment and Ecology





In News: A nearly intact mummified baby woolly mammoth was recently discovered in Canada.

More on the Topic:

- The mammoth has been named Nun cho ga in the Native American language Han.
- The name means “big baby animal”. The remains are thought to be of a female mammoth.
- The discovery is said to be the most-intact mammoth ever found in the continent of North America.

Source: Hindu
