



STANDING COMMITTEE ON COMMUNICATIONS AND INFORMATION TECHNOLOGY PULLS UP DEPARTMENT OF TELECOMMUNICATIONS (DOT) ON INTERNET SHUTDOWNS

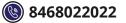
- House Panel report highlights action taken by government on its earlier observations/recommendations on 'Suspension of Telecom Services/Internet and its Impact'.
- Internet shutdowns are measures taken by government or on behalf of government to intentionally disrupt access to and use of information and communications systems online.
 - > State Governments can issue orders for temporary suspension of internet services to maintain law and order under Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017.
- Key Highlights of Report

	• Frequent internet shutdown without any empirical study on its effectiveness.		
Observations	No maintenance of official records on telecom services/internet shutdowns.		
	No study conducted to assess the impact of internet shutdown on economy.		
	• Only official members in Review Committee review the decision on Telecom Suspension.		
	➤ Also, committee isn't constituted by all states/UTs.		
Recommendations	• Commission a thorough study to assess impact of internet shutdown on economy and their effectiveness in dealing with public emergency and public safety.		
	• Lay down clear principle of proportionality and procedure for shutdown lifting in coordination with Ministry of Home Affairs (MHA) to prevent misuse of suspension rules.		
	• Both DoT and MHA should establish a mechanism to maintain centralized database of all internet shutdowns.		
	• Expand Review Committee composition by including non-official members for better checks and balances under Telecom Suspension Rules, 2017.		
	> Also, ensure that review committee are constituted by all states/UTs.		

GEOLOGICAL SURVEY OF INDIA (GSI) FINDS LITHIUM DEPOSITS IN JAMMU & KASHMIR

- For the first time, GSI has established Lithium inferred resources (which are in preliminary exploration stage i.e., G3) of 5.9 million tonnes in Salal-Haimana area of Reasi District of J&K (UT).
- Lithium, referred as white gold, is first of alkalis in periodic table. It's a non-ferrous metal.
 - > It is lightest solid metal. It is extracted from either brines or mined rocks. It has lowest density of all metals.
- GSI, attached office to Ministry of Mines, was set up in 1851 primarily to find coal deposits for Railways. It is Headquartered in Kolkata and has six regional offices.
 - > It is a scientific agency of India to carry out geoscientific activities.
- 50 percent of global lithium resources are located in Bolivia (maximum), Chile, and Argentina, which forms Lithium Triangle in South America.
 - > Australia is global leader in lithium production.
 - > India has discovered first lithium reserves in igneous rocks located in Marlagalla-Allapatna region of Karnataka's Mandya district.
- Significance of Lithium
 - > Key component of rechargeable batteries (used in EVs) and energy storage solutions.
 - > Lithium oxide is used in special glasses and glass ceramics.
 - > Critical mineral for energy transition, and net-zero emissions will require higher reliance lithium.







INDIA'S ACCREDITATION SYSTEM RANKED 5TH IN GLOBAL QUALITY INFRASTRUCTURE INDEX (GQII) 2021

- GQII program is an initiative to research and disseminate data on Quality Infrastructure (QI).
 - > It is supported by Physikalisch-Technische Bundesanstalt (PTB) and Federal Ministry for Economic Cooperation and Development (BMZ), Germany.
- GQII 2021 ranks 184 countries according to relative development of their QI.
 - > Overall rank of India's QI is 10 while Germany ranks 1, followed by China and USA.
 - > It aims to promote **metrology, standardization and accreditation.**

Parameter	Meaning	India's Rank	Responsible Agency
Metrology	Science of measurement, embracing both experimental and theoretical determinations at any level of uncertainty in field of science and technology.	21	National Physical Laboratory under Council of Scientific & Industrial Research (NPL-CSIR)
Standardization	Process of creating protocols to guide creation of good or service based on consensus of all relevant parties in industry.	9	Bureau of Indian Standards (BIS)
Accreditation	Formal, independent verification which establishes competence and credibility of conformity assessment bodies (CABs) which perform testing, certification, inspection, etc.	5	Quality Council of India (QCI)

- Importance of QI
 - > Helps in international cooperation by creating reliability and trust between trading partners.
 - > Lays foundations of quality and credibility, especially for sectors such as health and sustainable development.

TELECOM REGULATORY AUTHORITY OF INDIA (TRAI) RELEASES CONSULTATION PAPER ON DIGITAL CONNECTIVITY INFRASTRUCTURE PROVIDER (DCIP) AUTHORIZATION UNDER UNIFIED LICENCE (UL)

- TRAI is seeking views to introduce DCIP authorization under UL regime as it underlined the importance of robust Digital Connectivity Infrastructure (DCI) in economic development.
 - > UL offers service-wise authorizations, where licensees establish networks and use them to provide services.

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Different Layers & Licensing framework in India

Importance of DCI

- ➤ Increases **productivity** and provides amenities that enhance quality of life. It is used for **financial services**, **e-governance**, **tele-medicine etc.**
- ➤ Helps in implementation of various government schemes under Digital India, Make in India, Ayushman Bharat Digital Mission etc.
- Earlier, National Digital Communications Policy (NDCP-2018) emphasized on DCI under 'Propel India' mission.
 - > NDCP-2018 envisages enabling unbundling of different layers (e.g., infrastructure, network, services, and applications layer) through differential licensing. (refer image)
- DCIP will work at infrastructure and network layer; creating neutral third-party entities which can create passive and active DCI.
 - > Currently, Infrastructure Providers Category-I (IP-I) rolls out passive infrastructure while active infrastructure creation is permitted to Telecom Service Providers only.
- Passive Infrastructure refers to physical space, e.g. telecom towers, fiber distribution hub etc. while Active infrastructure refers to active elements such as antennas, back-haul connectivity etc.
- DCIPs can lease/rent/sell their infrastructure only to such entities which are licensed under Indian Telegraph Act.
- Potential Benefits Of DCIP: Increased common sharable DCI and network resources, cost reduction, attract investment, strengthen service delivery segment, etc.

GLACIAL LAKE OUTBURST FLOODS (GLOF) THREATEN 3 MILLION INDIANS: STUDY

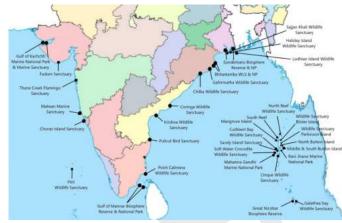
- Study was conducted by scientists at UK's Newcastle University, UK is first global assessment of areas at greatest risk of GLOF.
- GLOF occurs from unstable natural dam formed from glacier retreat.
 - When glacier retreats, it leaves behind large impression in ground filling it with water and lake is formed, this is known as moraine which can be impunded by pile of debris & ice.
- Causes behind GLOFs
 - > Build- up of water pressure or structural weakness of boundary due to increase in flow of water due to climate change-induced melting.
 - > Earthquake (Tectonic) or cryoseism (non-tectonic seismic event of glacial cryosphere).
 - > Avalanche of rock or heavy snow.
 - > Volcanic eruptions under ice.
 - > Heavy rainfall/melting of snow lead to massive displacement of water in a glacial.
- National Disaster Management Authority (NDMA) guidelines for reducing GLOFs
 - > Identify and Mapping Dangerous Lakes.
 - ➤ Use of Synthetic-Aperture Radar imagery to detect changes in water bodies, including new lake formations, during the monsoon months.
 - > Constructions and development in High prone areas should be prohibited.
 - Robust early warning system in vulnerable zones should be put in place.







- IMPAC5 is a global forum that brings together ocean conservation professionals and high-level officials to inform, inspire and act on **Marine Protected Areas (MPAs)**
 - > It aims to protect 30 percent of global ocean by 2030 2030 (i.e., 30*30 campaign).
 - > It supported Kunming-Montreal Global Biodiversity Framework, "Our Ocean, Our Future, Our Responsibility" Call for Action and Ocean Conservation Pledge.
 - > It was jointly hosted by Host First Nations (Musqueam, Squamish and Tsleil-Waututh) together with International Union for Conservation of Nature (IUCN), Canadian Parks and Wilderness Society (CPWS), Government of Canada and Province of British Columbia.



- MPA is a section of ocean where a government has placed limits on human activity.
 - > Currently, an estimated 7.65% of ocean is covered by MPAs.
 - > Important MPAs (coastal or marine) of India are as given in image.
 - They are notified as either 'national parks' or 'wildlife sanctuaries' under Wildlife (Protection) Act, 1972.
- **Need of MPAs**
 - > Protect marine habitats and variety of life that they support.
 - > Raising the profile of an area for marine tourism and broadening local economic options.
 - > Generate income through tourism and sustainable fishing.
 - > Maintaining climate change resilience as it protects coastal habitats to reduce human vulnerability.

ALSO IN NEWS



Governance norms for High-Value Debt-Listed Entity (HVDLE)

- SEBI proposed corporate governance rules for related party transactions (RPT) in a HVDLE.
- HVDLE companies are those having listed non-convertible debt securities of at least Rs 500
- RPTs to be placed for approval by shareholders where 90 percent or more shareholders are related parties and should be applicable to HVDLEs having only listed non-convertible debt securities.
 - > If 'objections' are received from debenture holders holding 75 percent or more in value, then board of directors should ensure that agenda item pertaining to RPTs is withdrawn.



Electricity Market Report 2023

- It is released by International Energy Agency (IEA).
- Observations
 - > World electricity demand remained resilient in 2022 amid global energy crisis triggered by Russia's invasion of Ukraine.
 - > Renewables and nuclear energy will dominate growth of global electricity supply over next three years, meeting more than 90% of additional demand.
- India Specific findings
 - > Demand growth to rise close to 5.6% on average per year during 2023-2025.
 - ➤ Gas-fired output fell by 36% in 2022 due to higher imported gas prices.
 - > Because of higher coal-fired generation, total power generation CO2 emissions rise by 8% from 2022 levels by 2025, despite falling CO2 intensity.



Alternative Investment Fund (AIF)

- NSE indices launched sub-category level benchmarks under Nifty AIF Benchmark.
- AIF is any fund established in India which is a privately pooled investment vehicle that collects funds from investors, both Indian or foreign, for investing.
- Different categories
 - > Category I: Mainly invests in start-ups, SMEs, or any other sector which Government considers economically and socially viable.
 - > Category II: These include private equity funds or debt funds for which no specific incentives or concessions are given by government or any other Regulator.
 - > Category III: AIF such as hedge funds or funds that trade to make short-term returns or such other funds which are open-ended and for which no specific incentives or concessions are **given by government** or any other Regulator.

Nord Stream pipelines from Russia

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NORWAY

Exclusive Eco Zones (EEZ)









Formula E race

- Top-tier motorsport series Formula E race will be taking place in India for the first time providing a big boost to Indian motorsports.
- Formula E stands for electric with the entirety of racing car powered by a battery.
 - > It aspires to accelerate change towards an electric future, one race and one city at a time.
 - > It is the first global sport to be certified with a net zero carbon footprint.
 - > It is powered by a 250kW battery. They can reach speeds of up to 280km/h.
 - > They promote sustainability and a greener world.



Line of Actual Control (LAC)

- Indian Army has geared up to face 3-tier PLA (People's Liberation Army) deployment across LAC in western and eastern sector, i.e.,
 - > Deployment of one border regiment, backed by two divisions and four combined armed **brigades (CABs)** in reserve.
 - > PLA has deployed three CABs across Siliguri corridor with reserve troops in Phari Dzong, Shigatse and Lhasa in interior of Tibet.
- LAC is 3,488-km border shared with China that runs along Ladakh, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.
 - > Characterized by high altitude terrain and thick habitation, it is not fully demarcated.



Nord Stream

- New report claims that 2022 destruction of Nord Stream pipelines was carried out by US and Norway.
- Nord Stream is a network of underwater gas pipelines in Europe to supply natural gas from Russia to Germany through Baltic- sea.
 - >It runs from Vyborg in northwest Russia to Lubmin in northeastern Germany (1,224 km-long) and became operational in 2011.
 - > It also delivered gas to western and southern parts of **Europe** as well, before being closed indefinitely.



Mission Antyodaya Survey (MAS) 2022-23

- It was launched by Ministry of Rural development and **Panchayati Raj** along with its portal and mobile application.
- MAS is conducted by Department of Rural Development since 2017-18.
 - ➤ It aims to assess the outcome of various development schemes in rural areas.
 - ➤ It is carried out coterminous with People's Plan Campaign (PPC).
 - > Survey-2022 Questionnaire has 183 indicators and 216 data points covering 21 areas.
 - > Areas covered in survey include fisheries, agriculture, fuel and fodder, good governance, roads, etc. Questionnaires are to be prepared in 13 languages.



Digital Payments Utsav

- It was launched by Ministry of Electronics and Information Technology.
- It is a campaign that will showcase India's journey of digital transformation.
 - > Focus of campaign will be on promoting digital payments in country and promote financial inclusion.



Quaoar

- New study has found that dwarf planet Quaoar has a Saturn-like ring of dust and debris that defies rules of physics.
- Quaoar is the seventh largest of known dwarf planets.
- > It was discovered in 2002. It is a trans-Neptunian object, i.e., it orbits Sun beyond its outermost planet Neptune.
- > Its ring is positioned at a distance of over seven planetary radii.



Finland (Capital: Helsinki)

- India and Finland are looking to expand ties across a range of cutting-edge technologies including quantum computing and nuclear technology.
- Political & Boundaries
 - > It is a Nordic Country located in **northern Europe.**
- > Bordered by Norway (north), Russia (east), Gulf of Finland (south), Gulf of Bothnia (southwest), and Sweden (northwest).
- > Part of Finland lies north of Arctic Circle, known as Upland Finland.
- Geographical features
 - > Largest lake: Saimaa (Finland is known as land of a thousand lakes).
 - > Largest River: Kemijoki. > Highest peak: Mount Halti.

