

### INTERNATIONAL TELECOMMUNICATION UNION

Recently, Dr Neeraj Mittal was unanimously elected as co-chair of the Digital Innovation Board of International Telecommunication Union (ITU).



International Telecommunication Union is the United Nations specialized agency for information and communication technologies. It was established in 1865 as **International Telegraph Union**.

- In 1947 the ITU became a specialized agency of the United Nations. It is an intergovernmental organization that **coordinates between governments and private sector bodies** with respect to global telecommunication and information communication technology (ICT) services.
- **Member countries:** It has a membership of **193 countries** and more than 1000 companies, universities and international and regional organizations.
- **Functions:**
  - allocate global radio spectrum and satellite orbits;
  - coordination and setting of technical standards related to telecommunication/ICT;
  - work to improve access to ICTs in underserved communities worldwide;
- **India and ITU:** India has been an active member of the ITU since 1869 and has been a regular member of the ITU Council since 1952.
- **Headquarters:** Geneva, Switzerland.

### What is Digital Innovation Board?

- It was formed under the aegis of **Innovation and Entrepreneurship Alliance** for Digital Development. It comprises of Ministers and Vice Ministers of Telecom/ICT of **23 Member Countries of ITU** spanning Asia, Europe, Africa, North and South America.
- ITU has started Innovation and Entrepreneurship Alliance for Digital Development to respond to significant unmet needs of ITU Membership in the area of innovation.

## USHA MEHTA

A movie was released recently which is based on the biography of Indian freedom fighter Usha Mehta.



**Usha Mehta** was born in a village named Saras, near Surat in Gujarat in 1920. She was a true Gandhian at heart and was popularly known as Ushaben.

- At the age of eight in 1928, she participated in a protest march against the Simon Commission.
- In 1942, she and her associates established the **Secret Congress Radio during Quit India Movement**. It played a crucial role in keeping the freedom movement leaders connected with the public.

### Setting up an underground station:

- **Background:** At the advent of the War in 1939, the **British had suspended all amateur radio licences** across the Empire. Operators were supposed to turn in all equipment to the authorities, with severe punishment for those who failed to do so.
- Alongside Mehta, **Babubhai Khakar, Vithalbhai Jhaveri and Chandrakant Jhaveri** were key figures in organising Congress Radio.

### Congress Radio case:

- The trial of the five accused in the— Mehta, Babubhai Khakar, Vithalbhai Jhaveri, Chandrakant Jhaveri, and Nanak Gainchand Motwane (who sold key pieces of equipment to the team) — generated a lot of excitement in Bombay.
- **Vithalbhai and Motwane were acquitted**, Mehta, Babubhai and Chandrakant received stern sentences.
- Usha Mehta was released from Pune’s Yerawada Jail in March 1946, and hailed in the **nationalist media as “Radio-ben”**.

## SHANGHAI COOPERATION ORGANISATION STARTUP FORUM

The fourth edition of the Shanghai Cooperation Organisation (SCO) Startup Forum was organized recently in New Delhi.



Shanghai Cooperation Organisation Startup Forum is a platform for the stakeholders from the **startup ecosystems from all SCO Member States** to interact and collaborate.

- It aims to create **multilateral cooperation and engagement** for startups among the SCO Member States. It will empower the local startup ecosystems in the Member States.
- The following are the objectives of the engagement:
  - **Sharing of best practices** to promote entrepreneurship and innovation to build knowledge-exchange systems.
  - **Bringing Corporates and Investors** across to work closely with startups and provide local entrepreneurs with much-needed support and market access.
  - **Increasing scaling opportunities** for startups by providing solutions in the field of social innovation and provide the Governments with a plethora of innovative solutions
  - **Facilitating cross-border incubation** and acceleration programs that will enable the startups to explore international markets and get focused mentorship.
- India will host the second meeting of the Special Working Group for Startups and Innovation (SWG) in November 2024 and SCO Startup Forum 5.0 in January 2025.
- Previously, Startup India had organized various initiatives for SCO Member states including:
  - **SCO Startup Forum 1.0:** The SCO Startup Forum **in 2020** laid the foundation for multilateral cooperation and engagement for startups among the SCO Member States.
  - **SCO Startup Forum 2.0:** The two-day Forum was held virtually in 2021. **SCO Startup Hub**, a single point of contact for the SCO startup ecosystem, was **launched in this forum**.

- **SCO Startup Forum 3.0:** DPIIT organised the first ever physical SCO Startup Forum in 2023 for the SCO Member States.
- **1st Meeting of the SWG:** The first Meeting of the SCO Special Working Group on Startups and Innovation (SWG), permanently chaired by India, was organised on the theme ‘Growing from Roots’ in 2023.

## WHAT ARE TACTICAL NUCLEAR WEAPONS?

Western officials recently confirmed that Russia has moved tactical nuclear weapons from its own borders into neighboring Belarus, several hundred miles closer to NATO territory.



- **Nuclear weapons**, just like other weapons, can be categorised into **two types: strategic and tactical.**
- **Strategic Nuclear Weapons:** They refer to nuclear weapons that have **bigger objectives**, such as **destroying cities or larger targets**, with larger war-waging objectives in mind.
- **Tactical Nuclear Weapons (TNWs):**
  - They are nuclear weapons **used for specific tactical gains on the battlefield.**
  - They are intended to **devastate enemy targets in a specific area without causing widespread destruction and radioactive fallout.**
  - These warheads can be **delivered via a variety of missiles**, torpedoes, and gravity bombs from naval, air, or ground forces.
  - The **explosive yield** of tactical nuclear weapons can **range from under one kiloton to about 100 kilotons**, whereas strategic nuclear weapons can have a yield of up to one thousand kilotons.
  - **Delivery systems** for tactical nuclear weapons also tend to **have shorter ranges, typically under 310 miles (500 kilometres)**, compared with strategic nuclear weapons, which are typically designed to cross continents.
  - They are the **least-regulated category of nuclear weapons** covered in arms control agreements.

- Countries possessing TNWs:
    - **Nine countries** have tactical nuclear weapons, according to the Federation of American Scientists.
    - They are **Russia, the United States, China, France, the United Kingdom, Pakistan, India, Israel and North Korea.**
    - **Russia** has a stockpile of an **estimated 2,000** tactical nuclear missiles.
    - The **U.S.** has an **estimated 200** tactical nuclear bombs, half of which are at bases in Europe.
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## ENFORCEMENT DIRECTORATE ARRESTS DELHI CHIEF MINISTER

### Why in news?

Delhi Chief Minister Arvind Kejriwal was arrested by the Enforcement Directorate (ED) in Delhi Excise policy-linked money laundering case.

The arrest, the first of a sitting Chief Minister, came hours after the Delhi High Court refused to grant protection to Mr. Kejriwal from any coercive action by the agency.

### Enforcement Directorate (ED)

- The Enforcement Directorate was established in the year 1956 as an ‘Enforcement Unit’ under the Department of Economic Affairs.
- Later, in 1957, this Unit was renamed as ‘Enforcement Directorate’.
- **Administrative control**
  - Presently, it is under the administrative control of the Department of Revenue (Ministry of Finance) for operational purposes.
- **Functions**
  - ED is responsible for enforcement of the Foreign Exchange Management Act, 1999 (FEMA), and certain provisions under the PMLA.
  - ED has the power to attach the asset of the culprits found guilty of the violation of FEMA.

- It has also been empowered to undertake, search, seizure, arrest, prosecution action, and survey, etc. against the offences committed under PMLA.
- **Appointment of Director of ED**
  - The ED Director is appointed by the central government on the recommendation of a committee:
    - chaired by the Central Vigilance Commissioner and
    - members comprising of Vigilance Commissioners, Home Secretary, Secretary DOPT and Revenue Secretary.

### **Key features of the Delhi Excise Policy 2021-22**

- Under the new policy, the city was divided into 32 zones inviting firms to bid on the zones. Instead of individual licences, bidding was done zone-by-zone.
- Also, licenses for 849 retail vends were issued through open bidding by the Excise department in
  - Under the old liquor policy, Delhi had 864 liquor shops, including 475 run by the four government agencies, and 389 were private.
- For the first time, shops were allowed to offer discounts to retail customers and reduced the number of dry days to three from 21.
- The new policy also had a provision for home delivery of liquor. It even proposed lowering the drinking age from 25 to 21.
- It also suggested the opening of shops till 3 am. However, these were not implemented.
- **Allegations made in the report**
  - In the report, Delhi Deputy CM Sisodia, who heads the excise department, was accused of making changes to the excise policy without the approval of the L-G.
  - The report said arbitrary and unilateral decisions taken by then Delhi Deputy CM had resulted in financial losses to the exchequer, estimated at more than Rs 580 crore.

- It alleged that kickbacks were received by the Delhi government and its leaders from owners and operators of alcohol businesses for preferential treatment.
    - These kickbacks were used to influence the Assembly elections held in Punjab and Goa in early 2022.
  - **ED Comes into picture**
    - Two cases, one by CBI and one on alleged money laundering being investigated by ED, have been registered in relation to the excise policy.
    - The ED told a court that the alleged proceeds of crime amounted to more than Rs 292 crore, and that it was necessary to establish the modus operandi.
      - It alleged that the “scam” was to give the wholesale liquor business to private entities and fix a 12% margin, for a 6% kickback.
      - It also alleged that AAP leaders received kickbacks to the tune of Rs 100 crore from a group of individuals identified as the South Group.
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## WHAT IS A WHITE DWARF?

Astronomers report the detection of four white dwarf stars of a recently discovered rare DAQ spectral subclass.



- A white dwarf is the **stellar core left behind after a dying star** has exhausted its nuclear fuel and expelled its outer layers to form a planetary nebula. It is what stars like the Sun become after they have exhausted their nuclear fuel.
- White dwarfs **no longer support nuclear fusion** reactions that generate energy, but they are **still extremely hot**.
- A typical white dwarf is **half as massive as the Sun**, yet only **slightly bigger than Earth**.
  - This makes white dwarfs **one of the densest collections of matter**, surpassed only by neutron stars.
- A newly born white dwarf **consists of helium, carbon and oxygen nuclei**, swimming in a sea of highly energetic electrons.

- Unlike most other stars that are supported against their own gravitation by normal gas pressure, white dwarf stars are supported by the degeneracy pressure of the electron gas in their interior.
  - Degeneracy pressure is the increased resistance exerted by electrons composing the gas, as a result of stellar contraction.
- Unless it is accreting matter from a nearby star, the white dwarf cools down over the next billion years or so.
  - It is predicted that they would ultimately form ‘black dwarfs’, although the Universe is likely not old enough for any black dwarfs to exist yet.
- The luminosity of white dwarfs can therefore be used by astronomers to measure how long-ago star formation began in a particular region.
- Many nearby, young white dwarfs have been detected as sources of soft or lower-energy, X-rays. By providing important ‘fossil’ records of the stars that they formed from, white dwarfs are an important cosmological tool.
- In 2006, Hubble was the first telescope to directly observe white dwarfs in globular star clusters, which astronomers reported as the dimmest stars ever seen in a globular star cluster.

## WHAT IS EBOLA?

Scientists recently found a new way in which Ebola reproduces in the human body, identifying a potential target for drugs to prevent the viral disease.



- Ebola virus disease (EVD, or Ebola) is a rare but severe illness in humans.
- It is caused by several species of viruses from the genus **Ebolavirus**, that are found primarily in sub-Saharan Africa.
- It gets its name from the **Ebola River**, which is near one of the villages in the **Democratic Republic of Congo** where the disease first appeared.
- **Transmission:**



- Ebola isn't as contagious as more common viruses like colds, influenza, or measles.
  - It spreads to people by contact with the skin or bodily fluids of an infected animal, like a monkey, chimp, or fruit bat.
  - Then it moves from person to person in the same way.
  - You can't get Ebola from air, water, or food. A person who has Ebola but has no symptoms can't spread the disease, either.
  - There are occasional Ebola disease outbreaks in people, occurring primarily on the African continent.
  - **Symptoms:**
    - Symptoms of Ebola can start two to 21 days after being infected by the virus.
    - Symptoms start out flu-like but can progress to severe vomiting, bleeding, and neurological (brain and nerve) issues.
  - **Treatment:**
    - There is no known treatment for Ebola, although experimental vaccines and therapeutics are being tested.
    - Current therapy consists of maintenance of fluid and electrolyte balance and the administration of blood and plasma to control bleeding.
  - **Mortality:**
    - Mortality rates for EVD range from 25 percent to 90 percent, with an average of 50 percent.
    - Death usually occurs as a result of shock due to fluid loss rather than blood loss.
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