

11/06/2026 Daily Current News

1. Global Navigation Satellite System (ECGNSS):

Context: The Ministry of Defence signed a ₹449-crore contract with Accord Software and Systems Private Limited (ASSPL) for the procurement of 20 Enhanced Capability Global Navigation Satellite System (ECGNSS) Jammers for the Indian Navy under the Buy (Indian-IDDMM) category, with at least 75% indigenous content. The ECGNSS jammers are designed to disrupt, deceive, and spoof enemy GNSS receivers by degrading satellite signal acquisition and tracking, thereby enhancing the survivability and operational safety of Indian naval ships in a multi-threat environment.

About Global Navigation Satellite System (ECGNSS):

- ❖ A Global Navigation Satellite System (GNSS) is a space geodesy technique that provides autonomous geospatial positioning with global coverage by using constellations of Earth orbiting satellites, ground control networks and receivers.
- ❖ It enables positioning, navigation and timing (PNT) across multiple sectors. GNSS receivers determine precise locations through trilateration using signals transmitted by satellites.
- ❖ Satellite Constellations: GNSS consists of satellites orbiting Earth that continuously transmit position and timing information for global navigation services.
- ❖ Positioning through Trilateration: Receivers determine their location by measuring distances from multiple satellites using the trilateration technique.
- ❖ Trilateration Technique: GNSS receivers determine their exact location by measuring the distance from at least four satellites and calculating the point where these distance measurements intersect.
- ❖ Multi-System Interoperability: Compatibility among GPS, GLONASS, Galileo, BeiDou, and other systems improves accuracy, availability, and reliability of positioning services.
- ❖ Ground Control Networks: A network of monitoring stations and data centers maintains satellite health, orbit accuracy, and system reliability.
- ❖ Signal Transmission: Satellites broadcast ranging signals on radio frequencies, enabling receivers to calculate precise location and time information.
- ❖ Global Data Infrastructure: Organizations such as the International GNSS Service (IGS) collect and process GNSS data worldwide, supporting navigation, scientific research, and geophysical studies.

GNSS System	Key Features
GPS (USA)	24 satellites; 20,200 km altitude; 12-hour orbital period; provides global coverage with continuous visibility of multiple satellites.
GLONASS (Russia)	24 operational satellites; 19,140 km altitude; global navigation coverage with at least four satellites visible most of the time.
Galileo (European Union)	Planned constellation of 30 satellites (27 operational + 3 spares); 23,222 km altitude; operational since 2016; global positioning services.

BeiDou/Compass (China)	35 satellites (5 GEO, 3 IGSO, 27 MEO); global coverage; advanced positioning and navigation capabilities.
IRNSS/NavIC (India)	Regional navigation system; geosynchronous satellites; provides accurate positioning services over India and surrounding regions.
QZSS (Japan)	Four-satellite regional system; enhances GPS accuracy in Asia–Oceania, particularly in urban and mountainous areas.

2. Ek Bharat Shreshtha Bharat programme:

Context: The Department of Higher Education, Ministry of Education under the Ek Bharat Shreshtha Bharat programme, is facilitating the Yuva Sangam Phase VI initiative. The programme aims to promote cultural exchange, experiential learning, and national integration among youth from diverse regions of the country.

About Ek Bharat Shreshtha Bharat programme:

- ❖ It is a flagship initiative of the GoI aimed at enhancing interaction and promoting mutual understanding between people of different states and union territories (UTs) of the country.
- ❖ The program focuses on celebrating the diversity of India while fostering unity and national integration.
- ❖ 16 participating Ministries/ Departments undertake activities throughout the year to promote sustained and structured cultural connect between paired States/UTs.
- ❖ It focus on the areas of language learning, culture, traditions & music, tourism & cuisine, sports and sharing of best practices etc.
- ❖ Ministry of Culture organizes various cultural programmes/ activities through its Zonal Cultural Centres (ZCCs) under EBSB taking into consideration the pairing States.

3. Battery Energy Storage System (BESS):

Context: The Defence Ministry has approved its first-ever 250 MW Solar Power Project with BESS on vacant defence land in Uttar Pradesh.

About Battery Energy Storage System (BESS):

- ❖ Battery Energy Storage Systems (BESS) are advanced electrochemical devices that store electricity in chemical form and discharge it when required.
- ❖ They play a crucial role in modern power systems by ensuring grid stability, optimising energy use, and facilitating the large-scale integration of renewable energy sources.
- ❖ These are devices that enable energy from renewables, like solar and wind, to be stored and then released when the power is needed most.
- ❖ Batteries receive electricity from the power grid, straight from the power station, or from a renewable energy source like solar panels or other energy source, and subsequently store it as current to then release it when it is needed.

❖ Main components:

Batteries: Store electrical energy (most commonly lithium-ion).

Power Conversion System (PCS): Converts DC electricity from batteries to AC for use on the grid, and vice versa.

Battery Management System (BMS): Monitors and controls battery performance, health, and safety.

Energy Management System (EMS): Coordinates the operation of all components for optimal performance.

Battery Type	Key Features / Advantages
Lithium-ion Batteries	Most widely used in BESS; high energy density, fast charging/discharging, scalable, and long cycle life (up to 20 years).
Lead-acid Batteries	Traditional and cost-effective; widely available, recyclable, and commonly used for backup and off-grid applications.
Sodium-ion Batteries	Emerging technology; lower cost than lithium-ion, safer operation, and performs well at higher temperatures.
Zinc-air Batteries	Use oxygen from the air as a reactant; offer high theoretical energy density and lower-cost materials.
Nickel-Cadmium (NiCd) Batteries	Durable and reliable in extreme conditions; known for long operational life.
Flow Batteries	Use liquid electrolytes; long lifespan (up to 25 years), highly scalable, non-flammable, and ideal for long-duration energy storage.

4. Epichlorohydrin:

Context: Bureau of Indian Standards (BIS) has for the first time set norms for tea bags prohibiting harmful chemicals like epichlorohydrin.

About Epichlorohydrin:

- ❖ Meaning: Epichlorohydrin is a chlorinated epoxide compound used as an important industrial chemical.
- ❖ Major Uses: Used in the manufacture of epoxy resins, synthetic glycerine, elastomers, and specialty chemicals.
- ❖ Appearance: A clear, colourless liquid with a chloroform-like odor.
- ❖ Properties: It is highly volatile and flammable and can release toxic chlorinated fumes when heated or burned.
- ❖ Health Hazards: Exposure can irritate the eyes, skin, and respiratory system.
- ❖ Carcinogenicity: Classified as a probable human carcinogen.

- ❖ Other Risks: Long-term exposure may affect the blood and reproductive system.

5. *Artemis III:*

Context: NASA announced the four-person prime crew for Artemis III on 9 June 2026 at the Johnson Space Center in Houston.

About Artemis III:

- ❖ Artemis III is a NASA-led crewed mission under the Artemis Program aimed at testing lunar mission technologies.
- ❖ The mission is scheduled for launch in late 2027 from Kennedy Space Center, Florida.
- ❖ It is part of NASA's Artemis programme that utilizes the Orion spacecraft and commercial human landing systems.
- ❖ The mission will test rendezvous and docking operations between Orion and lunar landers in low Earth orbit.
- ❖ The prime crew includes Randy Bresnik (Commander), Luca Parmitano (Pilot), and Andre Douglas and Frank Rubio (Mission Specialists).
- ❖ Bob Hines has been designated as the backup crew member.
- ❖ The mission will evaluate docking with lunar landers developed by Blue Origin and SpaceX.
- ❖ The crew will spend about two weeks conducting tests in Earth orbit.
- ❖ Artemis III will also test the Axiom Extravehicular Mobility Unit (AxEMU) lunar spacesuit.
- ❖ Following the February 2026 mission revision, the first human lunar landing is now planned under Artemis IV in 2028.

6. *Article 142:*

Context: The Supreme Court used its powers under Article 142 to overturn a POCSO conviction, noting the victim later married the man as an adult. The court observed that the couple should now be allowed to live “peacefully in society as spouses”.

About Article 142:

- ❖ Constitutional Safety Valve: Article 142(1) empowers the Supreme Court to ensure "complete justice" by filling legislative gaps where existing laws provide no adequate remedy.
- ❖ Inherent and Residuary Power: Article 142 is an inherent constitutional power enabling the Supreme Court to transcend procedural limitations to prevent injustice.
- ❖ Supremacy Over Ordinary Laws: In *Delhi Judicial Service Association vs. State of Gujarat* (1991), the Court held that statutory restrictions cannot curtail its powers under Article 142.
- ❖ Precedence of Natural Justice: In *Canara Bank vs. Debasis Das* (2003), the Court emphasized that substantive justice and fairness must prevail when formal legal remedies are inadequate.
- ❖ Exclusive Power of Supreme Court: In *Anil Kumar Jain vs. Maya Jain* (2009), the Court clarified that High Courts' powers under Article 226 are not equivalent to the Supreme Court's extraordinary powers under Article 142.

Quick Bites:

- ☐ Union Minister of State for Labour and Employment and Micro, Small & Medium Enterprises, Government of India, Sushri. Shobha Karandlaje, led the Indian delegation at the 114th International Labour Conference (ILC) in Geneva, Switzerland, underlining India's commitment to inclusive growth, gender equality, and social dialogue.
- ☐ The Ministry of Tribal Affairs, through the Tribal Cooperative Marketing Development Federation of India (TRIFED), today unveiled RISA - Timeless Tribal, a dedicated premium brand for tribal textiles, embroideries and handicrafts, and inaugurated the exclusive RISA Store at Gallery No. 2, Rajiv Gandhi Handicrafts Bhawan, Connaught Place, New Delhi.
- ☐ Union Home Minister Amit Shah launched the Land Port Management System (LPMS) named VINIMAY in New Delhi on 9 June 2026. VINIMAY is a centralised digital platform for land ports in India and it integrates cargo, passenger and vehicle processing on a single interface.
- ☐ Prime Minister Narendra Modi became India's longest-serving continuously elected Prime Minister on 10 June 2026 after completing 4,399 continuous days in office.
- ☐ Meta Platforms Inc. and Reliance Industries Ltd. announced an agreement on 10 June 2026 to build and lease an artificial intelligence data centre in India. Reliance Industries will construct a 168-megawatt AI-enabled facility in Jamnagar, Gujarat, and Meta will lease the capacity.
- ☐ The Andaman and Nicobar Islands set a Guinness World Record for the "Tallest Human Stack Underwater" on 3 May 2026 at the Lighthouse dive-site on Swaraj Dweep, also known as Havelock Island. The underwater formation used 14 scuba divers and reached a height of 22.3 metres.
- ☐ The official mascots for the 2026 FIFA World Cup are Clutch the Bald Eagle (USA), Zayu the Jaguar (Mexico), and Maple the Moose (Canada). The primary official tournament theme and anthem is the hit song "Dai Dai" by Shakira and Burna Boy.
- ☐ The Education Ministry issued three Letters of Approval (LoAs) to three Foreign Higher Education Institutions — University of Bristol, the University of York and the University of New South Wales (UNSW)

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