

Daily Current Affairs

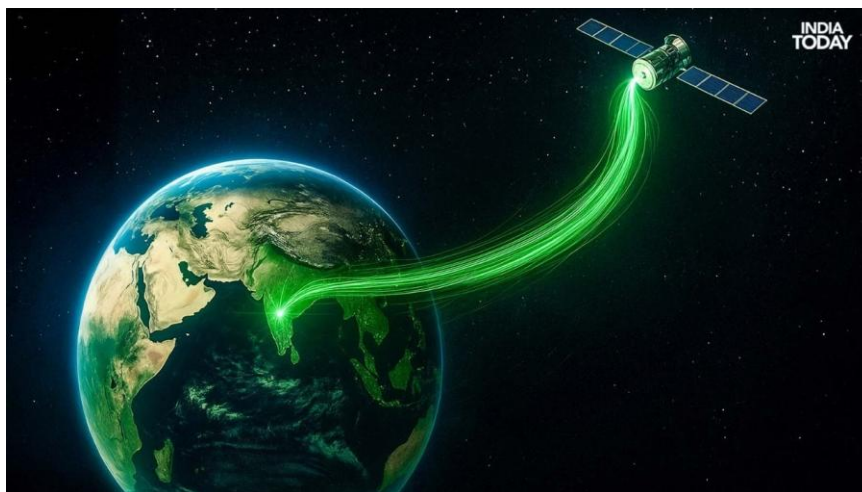
14 October 2026

DRDO Successfully Tests Quantum Key Distribution Platform

- The Defence Research and Development Organisation (DRDO) has configured and tested its Quantum Key Distribution (QKD) platform on the live network of the dynamic test ranges at the Proof & Experimental Establishment (PXE), Chandipur, Odisha. The system is designed to strengthen the security of real-time observations and telemetry generated during artillery and armoured weapon trials.
- What Is Quantum Key Distribution?
- Quantum Key Distribution is an advanced cryptographic technique used to generate and share secure encryption keys through quantum states. Unlike encryption itself, QKD provides the keys that can subsequently be used with encryption algorithms to protect sensitive information.
- One of its major advantages is that attempts to intercept quantum signals can disturb their quantum states. This disturbance can help the communicating parties identify possible eavesdropping attempts.
- Development and Collaboration
- The platform was designed and developed under DRDO's Microelectronic Devices, Computational Systems & Cyber Security (MCC) cluster. Bengaluru-based technology company Taqbit Labs is serving as the production partner.
- The platform aims to enable the detection of eavesdropping and provide a high level of security for sensitive military communications.
- Earlier Field Trials
- In July 2026, DRDO completed military field trials of a scalable, fibre-based QKD system in collaboration with Taqbit Labs. The system was tested over a 100-

kilometre optical fibre link connecting Prayagraj and Vindhyachal in Uttar Pradesh.

- The trial recorded an optical link loss of 26 decibels (dB). Its Quantum Bit Error Rate (QBER) was measured at 6%, while the secure key generation rate was approximately 5 kilobits per second. According to the supplied source, this rate was adequate for encrypted text and low-bandwidth voice communication.
- Taqbit Labs has been working with DRDO on QKD systems for the Indian Armed Forces since 2020.
- Significance
- Secure communications are essential for modern military operations, where sensitive information must be protected against interception. The development of indigenous QKD technology can contribute to India's defence cybersecurity capabilities and strengthen the protection of critical military data.



Oman Replaces US as India's Largest LNG

- Oman became India's largest liquefied natural gas (LNG) supplier in September 2026, replacing the United States. India imported 2.17 million tonnes of LNG that month, 14% less than the 2.5 million tonnes imported in August.
- Oman shipped 585,000 tonnes of LNG to India in September 2026, an 11.6% increase from August. Its shipments made up 27% of India's total LNG imports for the month.
- Nigeria ranked second, supplying 351,000 tonnes, despite a 35% month-on-month decline. The United States fell from first place in August, when it supplied 848,000 tonnes, to third place in September. Its LNG exports to India declined

by 59%. Qatar, previously a dominant supplier to India, ranked sixth, supplying about 94,000 tonnes.

- LNG is natural gas cooled to approximately -162°C so that it becomes a liquid for storage and transport. Liquefaction reduces natural gas to roughly one-sixth-hundredth of its gaseous volume. Specially insulated LNG carriers transport it, and receiving terminals convert it back into gas through regasification.
- India's supplier mix in September was shaped by efforts to diversify energy imports during geopolitical disruptions in West Asia. Competition from European importers for US cargoes also affected the availability of American LNG for India. Qatar's shipments were partly affected by disruptions following an Iran strike on Ras Laffan Industrial City in March 2026.
- Oman supplied 585,000 tonnes of LNG to India in September 2026, while the United States supplied 59% less than in August. Nigeria ranked second and Qatar ranked sixth among India's LNG suppliers that month.



Punjab To Host Men's Asian Champions Trophy

- Punjab will host the Men's Asian Champions Trophy from 27 October to 5 November 2026 in Jalandhar and Mohali. It will be the first international hockey tournament in Punjab since the 2009 Punjab Gold Cup. India will host the competition for the second time and enter as defending champions and five-time winners.
- The six participating teams are India, Malaysia, South Korea, China, Japan and Bangladesh. Each team will play every other team once in the league stage, and the top four teams will qualify for the semifinals. India's title wins came in 2011,

2016, 2018, 2023 and 2024. India will begin its campaign against Bangladesh on 27 October in Jalandhar.

- The Olympian Surjit Singh Hockey Stadium at Burlton Park in Jalandhar will host the opening ceremony and league-stage matches from 27 October to 2 November. The stadium is named after Surjit Singh, an Indian defender and member of the 1975 World Cup-winning team.
- India is the most successful team in the Men's Asian Champions Trophy, with five titles. Punjab has produced Indian hockey players across generations, including Udham Singh, Balbir Singh Senior, Manpreet Singh and Harmanpreet Singh.
- The 2026 tournament's league stage is scheduled in Jalandhar, while its semifinals and medal matches are scheduled in Mohali. India's opening match is against Bangladesh on 27 October 2026.



Oscar Whitfield Wins Young Wildlife Photographer of the Year 2026

- On 14 October 2026, 14-year-old British photographer Oscar Whitfield was named Young Wildlife Photographer of the Year 2026. He lives in Zimbabwe and won with a black-and-white photograph titled "Labour of Love", which captures a dung beetle pushing a ball of dung.
- The Natural History Museum in London runs the Wildlife Photographer of the Year competition. The competition received 65,403 entries from 121 countries and territories in 2026, a record total. It includes an overall young photographer

award as well as an adult overall award. The 2026 edition marked the competition's 62nd year.

- Wildlife photography records animals in their natural environments and can document their behaviour, habitats and interactions. "Labour of Love" depicts dung rolling, a behaviour in which a dung beetle shapes dung into a ball and pushes it.
- Whitfield photographed the beetle from ground level, with the camera positioned at the animal's eye level. The 2026 adult and young overall winners were both recognised for black-and-white photographs; this was the first time that had occurred in the competition's history.
- Dung beetles feed partly or entirely on dung, and many species belong to Scarabaeinae, a subfamily of Scarabaeidae. Some dung beetles roll dung into balls, while others bury it beneath the ground or use it in underground chambers.



Google Launches Gemini 4 Argon AI Model

- Google launched Gemini 4 Argon globally on 13 October 2026 after an earlier limited release to testing partners. The artificial intelligence model is designed for complex tasks in software engineering, finance, legal services, cybersecurity and scientific research.
- Developers and businesses can access it through the Gemini API, AI Studio and Google Antigravity; eligible Google AI Ultra and Pro subscribers can use it through the Gemini app and AI Mode in Search.
- The introductory API price is 2 per million input tokens and 10 per million output tokens. Cached input tokens receive a 95 per cent discount. The introductory

prices apply until 30 November 2026, after which standard rates are set to double.

- A token is a unit of text processed by an AI model; a cached input token is input reused from an earlier request.
- Google plans to offer 10,000 scientists six months of free access to the highest usage tier in Google Antigravity. Access is subject to eligibility, capacity and selection. Gemini 4 Argon is the first model in a wider Gemini 4 family.



REVIEW QUESTIONS

Q1. Where did DRDO test its Quantum Key Distribution (QKD) platform on a live network?

- A. Sriharikota, Andhra Pradesh
- B. PXE, Chandipur, Odisha
- C. Pokhran, Rajasthan
- D. Bengaluru, Karnataka

Answer: B. PXE, Chandipur, Odisha

Q2. Which company is DRDO's production partner for the Quantum Key Distribution platform?

- A. Bharat Electronics Limited
- B. Hindustan Aeronautics Limited
- C. Taqbit Labs
- D. Solar Defence and Aerospace Limited

Answer: C. Taqbit Labs

Q3. In July 2026, DRDO tested a fibre-based QKD system over which distance between Prayagraj and Vindhyachal?

- A. 50 km
- B. 75 km
- C. 100 km
- D. 150 km

Answer: C. 100 km

Q4. Which country became India's largest LNG supplier in September 2026, according to the supplied presentation?

- A. Qatar
- B. United States
- C. Nigeria
- D. Oman

Answer: D. Oman

Q5. LNG is converted into liquid form by cooling natural gas to approximately which temperature?

- A. -50°C
- B. -100°C
- C. -162°C
- D. -200°C

Answer: C. -162°C

Q6. Which state is scheduled to host the Men's Asian Champions Trophy 2026?

- A. Odisha
- B. Punjab
- C. Haryana
- D. Uttar Pradesh

Answer: B. Punjab

Q7. Against which team is India scheduled to begin its campaign in the Men's Asian Champions Trophy 2026?

- A. Malaysia
- B. Japan
- C. Bangladesh
- D. South Korea

Answer: C. Bangladesh

Q8. Who won the Young Wildlife Photographer of the Year 2026 award?

- A. Oscar Whitfield
- B. David Attenborough
- C. Michael Woodford
- D. Robert E. Hall

Answer: A. Oscar Whitfield

Q9. What is the title of Oscar Whitfield's winning wildlife photograph?

- A. Nature's Wonder
- B. Labour of Love
- C. The Silent Forest
- D. A World of Wildlife

Answer: B. Labour of Love

Q10. On which date did Google globally launch the Gemini 4 Argon AI model, according to the supplied presentation?

- A. 10 October 2026
- B. 11 October 2026
- C. 12 October 2026
- D. 13 October 2026

Answer: D. 13 October 2026