National Current Affairs

Defence Ministry approves delegation of powers to BRO

The Union Defence Ministry has approved delegation of administrative and financial powers to the Border Roads Organisation (BRO).

The purpose of delegation of powers is to improve the functioning of the BRO and speed up works to avoid delays in projects and to achieve the desired outcomes according to the requirement of the Armed Force.

Need

The BRO is engaged in road construction to provide connectivity to difficult and inaccessible regions in the border areas of the country. On various occasions, Comptroller and Auditor-General (CAG) and the Parliamentary Standing Committee has highlighted delay in the completion of strategic border roads. In pursuance of this, Defence Ministry had intended to bring transformational changes in the BRO in order to improve the pace of execution of works.

Key Facts

- Departmental and Contractual works: Defence Ministry has now approved that for both departmental and contractual mode of execution of projects. Moreover, Chief Engineer of BRO can accord administrative approval upto Rs. 50 crore and ADGBR upto Rs. 75 crore and DGBR upto Rs.100 crore.
- In the earlier scheme of delegation of powers, Chief Engineer was able to give administrative approval of works only upto Rs. 10 crore, that too only for departmental works. The ADGBR had powers to accord administrative approval only upto Rs. 20 crore. In case of contractual works, all administrative approvals were given by DGBR, who had powers only upto Rs.50 crore.
- Speeding up the tendering process: Defence Ministry also has enhanced the powers of Chief Engineer for acceptance of bids in tendering process with cost of contract upto Rs. 100 crore and upto Rs. 300 crore of ADGBR. Even the entire tendering process including acceptance of bids will be now completed at the level of Chief Engineer/ADGBR for a majority of the contracts.
- Fast procurement of latest construction machinery and equipment: Defence Ministry has enhanced the delegation of powers upto Rs. 100 crore to DGBR for procurement of both indigenous and imported equipment. Even, DGBR power hiring of construction equipment has been enhanced upto three years and for Chief Engineers' (Project) hiring power has been enhanced from 6 months to one year.

About Border Roads Organisation (BRO)

- BRO develops and maintains road networks in India's border areas and friendly
 neighbouring countries. It functions under the Defence Ministry. It plays pivotal role
 in construction, maintenance and upgradation of strategic infrastructure, in remote and
 far flung border areas
- Officers from Border Roads Engineering Service (BRES) and personnel from General Reserve Engineer Force (GREF) form parent cadre of BRO. It is also staffed by officers and troops drawn from Indian Army's Corps of Engineers, Army Service Corps, Electrical and Mechanical Engineers and army personnel on extra regimental employment.

8th World Renewable Energy Technology Congress in Delhi

On August 21, 2017, the Minister of State for Power, Coal, New and Renewable Energy and Mines (Independent Charge) Shri Piyush Goyal addressed the 3- day 8th World Renewable Energy Technology Congress in New Delhi.

- The Energy and Environment Foundation would be organizing 8th World Renewable Energy Technology Congress & Expo-2017 from 21st to 23rd August, 2017 at the Expo & Convention Centre, Manekshaw Centre, Delhi Cantt, Delhi, India.
- The theme of the conference is "Renewable Energy: What Works".

Important session of the conference

- During the opening session of the conference, the Minister also gave away Energy and Environment Foundation Global Excellence awards 2017.
- The Annual Conference also pictures and was planned in the backdrop of India's vision on achieving "Energy Independence and Power for all by 2022".
- Shri Goyal talked about the 3Ds related to energy such as De-carbonization of the energy space; to look at more Decentralization of energy space; and more and more Digitalization of the energy space.

<u>Dr. Jagdish Mukhi commissioned IN LCU L52, Second Ship of Landing Craft Utility into the Indian Navy at Port Blair</u>

On August 21, 2017 Dr. Jagdish Mukhi, Lieutenant Governor, Andaman and Nicobar Islands, commissioned IN LCU L52 into the Indian Navy at Port Blair. IN LCU L52 is the second Landing Craft Utility (LCU) Mk-IV class.

- This ship has been designed and built by Garden Reach Shipbuilders and Engineers, Kolkata.
- LCU L52 ship is an amphibious ship with the primary role to transport and deploy Main Battle Tanks (MTBs), Armoured Vehicles, troops and equipment from ship to shore. It is 62.8 meters long and 11 metres wide. It has 90% indigenous content.

- The ship has endurance of around 1,500 nautical miles at 12 knots. It is fitted with state-of-the-art equipment and advanced systems like Integrated Platform Management System (IPMS) and Integrated Bridge System (IBS).
- LCU MK-IV will be based in the Andaman and Nicobar Command. It can be deployed for multirole activities like beaching operations, search and rescue, disaster relief operations, supply and replenishment and evacuation from distant islands. It will contribute to the nation's maritime security needs.
- This ship has multirole activities like beaching operations, search and rescue, disaster relief operations, supply and replenishment and evacuation from distant islands.
- Commander Kaushik Chatterjee, will be commanded with 05 officers, 46 sailors and is capable of carrying 160 troops
- The ship, displacing 830 Tons, is capable of transporting various kinds of combat equipment such as Main Battle Tanks Arjun, T72 and other vehicles.
- The ship is fitted with state-of-the-art equipment and advanced systems like Integrated Bridge System (IBS) and Integrated Platform Management System (IPMS).
- The remaining of six ships with the same class at M/S GRSE, Kolkata are expected to be inducted in the next two years. The induction of these ships will contribute to the nation's maritime security needs and is in consonance with 'Make in India'.

40% reservation for girls at planned schools, higher educational institutions

- Union minister Mukhtar Abbas Naqvi has informed that the government has decided to offer 40 per cent reservation for girls at 100 Navodaya-type schools and five higher education institutes.
- A panel formed by the Maulana Azad Education Foundation (MAEF), a government-funded agency, had recommended a three-tier model to tackle educational backwardness among minorities, particularly the Muslims.
- There are six notified minority communities in the country: Muslims, Buddhists, Christians, Sikhs, Parsis and Jains.
- The suggested model includes creating infrastructure to impart education at primary, secondary and tertiary levels by opening 211 schools, 25 community colleges and the five institutes. The proposed schools could work on the patterns of Kendriya Vidayala or Navodaya Vidyalaya.
- Students from various rural areas will be selected and provided with quality education, food and lodging facilities under the Navodaya Vidyalaya system.
- Multi-sectoral development programme (MsDP) is for developing infrastructure and creating assets in areas dominated by minority community with an aim to take tangible and intangible benefits to them. The governments in Rajasthan and Uttar Pradesh have expressed interest in setting up the institutes for higher education.

On August 20, 2017 Assam state government is introducing a new Scheme called, Scheme for Compassionate Family Pension (CFP) at GAUHATI. The scheme plans to offer the compassionate family pension instead of job offers to family members due to some practical difficulties.

- A new scheme called 'Scheme for Compassionate Family Pension in lieu of Compassionate Appointment', which will be known as 'Compassionate Family Pension Scheme' or CFP Scheme.
- Current Policy couldn't satisfy the objectives completely and legal heir fails to get an appointment immediately due to lack of educational qualifications and sometimes non-availability of vacancies.
- The scheme will be applicable to those employees who died in harness on or after April 1, 2017, but the relevant office message related to the compassionate appointments will be applicable to those who died on or before March 31, 2017.
- The new scheme will be applicable to all employees of the state government, all others as eligible under Assam Services (Pension) Rules, 1969, all state government employees under NPS category and All India Services officers borne on Assam cadre.

HRD Minister Shri Prakash Javadekar launches 'Swasth Bachche, Swasth Bharat'

On August 21, 2017, the Union Ministry of Human Resource Development (HRD) launched 'Swasth Bachche, Swasth Bharat' Programme in Kochi.

• The program is an initiative of Kendriya Vidyalaya Sangathan to prepare a physical Health and Fitness Profile Card for more than 12 lakhs of Kendriya Vidyalaya students.

About Swasth Bachche, Swasth Bharat programme

- The programme aims to provide a comprehensive and inclusive report card for children covering all age groups and children of different abilities. Its main objective is to make students, teachers and parents aware about the importance of good health and fitness and encouraging 60 minutes of play each day.
- The programme also intends to imbibe values of Olympics and Paralympics amongst students. The objectives are bringing back the childhood amongst children, make recreational games and physical activity an integral part of learning process, motivating potentially outstanding performers in various games and sports of excellence, using technology for analytics and data capture and giving access to schools, parents and teachers.

Government launches digital police portal under CCTNS

The Union Ministry of Home Affairs launched digital police portal under Crime and Criminal Tracking Network and Systems Project (CCTNS).

The portal is a smart policing initiative of the Government to provide services to citizens and aid efficient police investigation. It will help in realising Government's dream of 'Minimum Government Maximum Governance'.

Digital police portal

The police portal is a platform for citizens to file online crime related complaints and also request for antecedent verification. It will also provide 11 searches and 46 reports from the national database for state police and central investigation agencies. Central investigating and research agencies also have been provided logins to the portal to access crime statistics.

About Crime and Criminal Tracking Network and Systems Project (CCTNS)

The CCTNS project was initiated in 2009 as part of police modernisation programme under the national e-governance project. It was conceived to bring all 16,000 police stations in India under a single network to counter terror challenges. The core objective of CCTNS is to connect all the police stations so that any of the police stations can contact any other police station; thereby facilitate collection, storage, retrieval, analysis and transfer the information among police stations, state headquarters and central police organizations.

International Affairs

Lost wreckage of warship USS Indianapolis found in pacific after 72 years

A team of civilian researchers led by Microsoft co-founder Paul Allen has discovered the wreckage of World War II warship USS Indianapolis nearly after 72 years. It is 18000 feet (5.5 km) below the surface in the Pacific Ocean. It has been announced on 18th of August 2017.

Key Notes:

- The Indianapolis was destroyed returning from its secret mission to deliver parts for the atomic bomb which was later used on Hiroshima.
- Of the 1,196 men on board, just 316 were rescued the largest loss of life at sea in the history of the US Navy. Only of them, 22 are alive today.
- The USS Indianapolis was destroyed on 30 July 1945 when, somewhere in the Philippine sea between Guam and Leyte, it was hit by a torpedo from a Japanese submarine.

- The wreck was located by the expedition crew of Paul Allen's Research Vessel Petrel, a 250 foot vessel equipped with high-tech equipment capable of diving to 6000 meters.
- The 13-person crew was led to the location of the USS Indianapolis through the research carried out in 2016 by Richard Hulver, a historian with the Naval History and Heritage Command.
- The information rendered by the landing craft led the research team to a new position and estimated the search area for Allen's team.
- The crew will continue to survey the site and tour of the wreckage in compliance with relevant US law for searching war graves.

US-South Korea begin annual "The Ulchi Freedom Guardian" military drills

The Ulchi-Freedom Guardian is a military drill which sees the US and South Korea join forces in a string of exercises.

- The annual drill involves huge land, air and sea exercises, with tens of thousands of troops involved from both countries.
- The exercises, designed to improve South Korea's defence, are carried out to recognise the treaty between the Republic of Korea and the United States signed in 1953.
- They are named after a famous Korean general, Munduk Ulchi, who lived in the early seventh century and was a successful army leader.
- The drill is expected, from August 21 to August 31, 2017. It also involves computer-simulated war games with 30,000 American and 50,000 South Korean troops, according to South Korea's defence ministry and the US military command in Seoul.
- It is believed the exercises will involve around 17,5000 US troops mostly involved in the simulation side of the drills.

Qatar to build Arabian cap-shaped stadium for FIFA World Cup

Qatar will build a stadium shaped like an Arabian cap for the 2022 FIFA World Cup.

- This symbolic design embodies everything that unites us as Arabs and Muslims, and is a fitting tribute to the first FIFA World Cup in the Middle East. Qatar is building at least eight air-conditioned stadiums for the tournament.
- Doha's Al Thumama stadium, designed by a Qatari architect in the shape of a traditional knitted "gahfiya" Arabian cap, will host 40,000 fans at a World Cup quarter final match, the country's 2022 organising body.

China launches first cyber court in e-commerce hub of Hangzhou

China launched its first cyber (internet) court specialising in handling internet-related cases in the e-commerce hub of Hangzhou, amid a spike in the number of online disputes. The cyber court will handle cases such as online trade disputes and copyright lawsuits. These cases handled by the court will be tried online.

Key Facts

- According latest report of China Internet Network Information Center, China had about 751 million netizens and 724 million mobile Internet users as of the end of June 2017. With high internet penetration, Chinese people have increasingly turned to online shopping and payment.
- The Hangzhou Internet Court will be located in Hangzhou, capital of east China's Zhejiang Province. It will provide a judicial guarantee for maintaining cyber security, resolving online disputes and promoting the integration of the Internet with society and the economy.
- Hangzhou municipal legislature appointed the president, vice presidents and judges of the court. The province is home to many Internet companies, including e-commerce giant Alibaba.

Banking & Finance

SBI tops share of willful default to PSBs

Country's largest lender SBI accounts for over 27% of the total amount owed to public sector banks by wilful defaulters announced on 20th August 2017.

Key Points:

Total 1,762 wilful defaulters owed Rs 25,104 crore to State Bank of India as on 31 March.

- Punjab National Bank (PNB) is next on the list with 1,120 wilful defaulters having outstanding non-performing assets (NPAs) or bad loans of Rs12,278 crore.
- Together these two banks account for Rs37,382 crore or 40% of the total outstanding loans.
- According to the Finance Ministry data total outstanding loans due to public sector banks by wilful defaulters amounted to Rs92,376 crore.
- The total outstanding loans by wilful defaulters rose to Rs92,376 crore at the end of financial year 2016-17, from Rs76,685 crore at the end of last fiscal 2015-16 up 20.4%.
- During 2016-17, 27 public sector banks, including SBI and its five associates had written off Rs81,683 crore, the highest in the last five fiscals.

- Gross NPAs of the public sector banks rose to Rs 6.41 lakh crore at the end of March 2017 as against Rs5.02 lakh crore a year ago.
- RBI has allowed banks to name and shame wilful defaulters by publishing their photographs.

SBI waives off up to 100% processing fee on car, gold, personal loans

State Bank of India (SBI) has announced waiver of up to 100% of processing fee on car loans, personal gold loans and personal loans for the festive season.

Key Points:

- SBI had previously waived off processing fee on the takeover of home loans.
- The bank has waived the entire processing fee on car loans till 31st December 2017 and half of the processing fee on personal gold loans till 31st October 2017.
- Customers can also avail 50% waiver on processing fee on Xpress Credit, a personal loan offering by the bank, till 30th September 2017.
- SBI's retail advances grew at 13.31% year-on-year from Rs 4,32,455 crore as on June 2016 to Rs 4,90,005 crore as on June 2017.

Business

Government imposes anti-dumping duty on tempered glass from China

The Union Finance Ministry (Revenue Department) has imposed anti-dumping duty on certain "textured toughened (tempered) glass" imported from China.

• The duty aims at protecting the domestic industry from cheaper imports. It will be effective for five years.

Textured toughened (tempered) glass

It is also known as solar glass, low iron solar glass or high transmission photovoltaic glass. It is used as a component in solar photovoltaic (PV) panels and solar thermal applications.

Background

The dumping duty was imposed by revenue department based on the recommendations of Directorate General of Anti-Dumping and Allied Duties (DGAD). Investigations of DGAD had found that the tempered glass has been exported to India from China below its associated

normal market value. It was also found that domestic industry had suffered material injury due to cheap imports from China.

Anti-dumping duty

Anti-dumping duty is an import duty imposed by government on imported products which have prices less than their normal values or domestic price. It is protectionist and counter import measure used by a country under the multilateral World Trade Organisation (WTO) regime to protect its domestic producers and market from below-cost/cheap imports. It varies from product to product and from country to country. In India, it is recommended by the Union Ministry of Commerce (i.e. by DGAD), while the Union Finance Ministry imposes it.

Anti-dumping duty on Chinese Products

So far, Government has imposed anti-dumping duty on 93 products imported from China. These products belong to a broad group of chemicals and petrochemicals, fibres and yarn, products of steel and other metals, machinery items, electric and electronic items, rubber or plastic products and consumer goods, among others.

Awards & Recognition

Indian -origin boy Rahul Doshi crowned 'Child Genius' in UK

An Indian-origin boy, 12-year-old Rahul Doshi was crowned as the UK's 'Child Genius' in a popular television quiz competition on 20 August 2017.

Key Points:

- Rahul Doshi won the Channel 4 show 'Child Genius' by defeating his opponent Ronan a 9 year old boy by 10-4 points in the programme's finale.
- Rahul Doshi believed to be having an IQ higher than Albert Einstein and Stephen Hawking.
- He has a vast knowledge of his chosen subject Edward Jenner's medical innovation and methodology in 18th Century England.
- The school boy from north London clinched the title by answering a question on 19th Century artists William Holman Hunt and John Everett Millais.
- Rahul has an IQ of 162, which is believed to be higher than the likes of Albert Einstein and Stephen Hawking.
- He qualifies to be a member of Mensa club the largest and oldest high IQ society in the world.
- Rahul ambition is to become a financial adviser.

Acquisitions & Mergers

Microsoft acquires Cycle Computing to accelerate users' movement to cloud

Microsoft has announced the acquisition of Cycle Computing on 21st of August 2017. It will help it easier for Azure customers to use High Performance Computing (HPC) and other Big Computing capabilities in the cloud and help them accelerate their movement to the cloud.

Key Points:

- Cycle Computing makes optimizing Hybrid HPC workloads easier and the process of bursting or migrating HPC clusters to the cloud more productive.
- It offers tools that help companies orchestrate and manage large scale compute jobs across hybrid environments.
- Azure has a massive global footprint and more than any other major cloud provider.
- It also has powerful infrastructure, Infini Band support for fast networking and state-of-the-art GPU capabilities.
- Microsoft can now support its expertise in extending and migrating Linux and Windows based HPC jobs to the cloud by acquiring Cycle Computing.
- The cloud gives customers the on-demand power and infrastructure necessary to run massive workloads at scale without the overhead.

About Microsoft

- Microsoft Corporation is an American multinational technology company with headquarters in Redmond, Washington.
- It develops, manufactures, licenses, supports and sells computer software, consumer electronics, personal computers, and services.
- Founded on April 4, 1975
- Founders: Bill Gates Paul Allen
- Chairman: John W. Thompson
- President: Brad SmithCEO: Satya Nadella

Science & Technology

Scientists discover new state of matter

Scientists Los Alamos National Laboratory, US have discovered a potential new state of matter that may help explain phenomena like superconductivity.

• It was discovered in the high-magnetic-field state of the heavy fermion superconductor CeRhIn5. Heavy fermions are intermetallic compounds, containing rare earth or actinide elements.

Key Facts

- In the new state, material's electrons are aligned in such a way, that they apparently reduce the symmetry of the original crystal. This appearance of electronic alignment in a prototypical heavy-fermion superconductor is called nematic behaviour.
- It is phenomenon of electronic symmetry breaking, common among the superconducting materials in high magnetic fields.
- It highlights the interrelation of nematicity and unconventional superconductivity, suggesting that nematicity is common among correlated superconducting materials. It appears to be universal among unconventional superconductors. Unconventional superconductivity develops near a phase boundary separating magnetically ordered and magnetically disordered phases of a material.

Superconductivity

- Superconductivity is the ability of certain materials to conduct electric current with practically zero resistance. For a material to behave as a superconductor, low temperatures are required i.e. they act as superconductors when they cooled below a characteristic critical temperature. Superconductivity was first observed in 1911 by H. K. Onnes, a Dutch physicist.
- Superconductivity is extensively used in magnetic resonance imaging (MRI), particle accelerators, magnetic fusion devices, microwave filters, high-speed magnetic-levitation trains, ultra-high-speed computer chips and high-capacity digital memory chips etc.

UK scientists create world's smallest surgical robot

UK Scientists have developed the world's smallest surgical robot with low-cost technology. It is used in mobile phones and space industries.

Key Points:

• The robot named Versius, mimics the human arm. It can be used to carry out a wide range of procedures in which a series of small incisions are made to circumvent the need for traditional open surgery.

- One of the key benefits of the robot is that it works like a human arm and contains technology that detects resistance to make sure the right amount of force is used when the instruments are inside the patient.
- The robot is much easier to use than existing systems, and take up about a third of the space of current machines.
- These include hernia repairs, colorectal operations, as well as prostate, ear, nose and throat surgery.
- Such procedures reduce complications and pain after surgery and speed up recovery time for patients.
- The robot is controlled by a surgeon at a console guided by a 3D screen in the operating theatre.
- Researchers used electronics from mobile phones to help the robot "think" and process information.
- The gear box technology originally designed for the space industry to help it move. The robot is set to be launched next year.

India's first calf born to surrogate cow in Pune

India's first calf delivered by a surrogate or recipient cow through In Vitro Fertilisation (IVF) technology carried out in a mobile laboratory was born in Indapur, Pune (Maharashtra). It has been named as Vijay.

This is for first time IVF procedure was successfully implemented at farm level with the help of mobile laboratory. Earlier similar experiment was carried out by the National Dairy Research Institute (NDRI) at the lab-level.

Key Facts

- The purpose of producing surrogate calf was to protect indigenous cow breeds in its
 original form which have been destroyed due to cross-breeding. The experiment was
 successfully under taken by the JK Trust, an organisation which works at improving
 cattle breed.
- In Vijay's case, the donor cow belonged to the indigenous Gir breed, whose population across the country is around one lakh (unevenly spread across Gujarat, Rajasthan and Maharashtra).
- In this experiment, the oocytes collected from the mother cow were kept in a special incubator. Using the IVF technology, these oocytes were fertilised inside the incubator with semen was collected from a Gir bull. After the oocytes developed into an embryo, they were transferred to the recipient cow.

In Vitro Fertilisation (IVF) technology

IVF or assisted reproductive technology (ART) is a process of fertilisation. In it, an egg is combined with sperm outside the body, in vitro (in glass or laboratory dish) to produce

embryo. The embryo is then transferred to the uterus with the intention of establishing a successful pregnancy.

Sports

Western & Southern Open 2017

The Cincinnati Masters currently called the Western & Southern Open is an annual outdoor hard court tennis event. The tournament was held annually at the Lindner Family Tennis Center in Mason, a northern suburb of Ohio near Cincinnati, in the United States.

- The 2017 Western & Southern Open was a men's and women's tennis tournament played on outdoor hard courts from August 14–20, 2017.western & southern open
- The tournament is the second largest summer tennis event in the U.S. after the U.S. Open, as its men's portion is one of nine elite Masters 1000 tournaments on the ATP World Tour and its women's event is one of five Premier 5 events on the WTA Tour.
- The 2017 tournament was the 116th men's edition and the 89th women's edition of the Cincinnati Masters.

Winners list

- 1. Bulgarian Grigor Dimitrov won his first Men's singles Masters 1000 title
- 2. Garbine Muguruza of Spain won women's singles
- 3. Frenchmen Pierre-Hugues Herbert and Nicolas Mahut won Men's Cincinnati Doubles
- 4. Chan Yung-jan and Martina Hingis captured women's double

FIBA Asia Cup: Australia crowned champions of Asia on tournament debut in Lebanon

Australia, playing for the first time at the rebranded FIBA Asia Cup, became the first Oceanic team to be crowned champions of Asia.

Key Points:

Australia has beaten Iran in final held on 20th August 2017.

The Australian Boomers have won the FIBA Asia Cup in their first attempt with a commendable victory over Iran in the gold medal game.

Total 16 teams have participated and Australia has got 79 points and runner team Iran got 56 points.

Matches held between:

- 1. Final: Australia 79 Iran 56
- 2. Bronze medal match: South Korea 80 New Zealand 71
- 3. Fifth-place match: China 79 Lebanon 78
- 4. Seventh-place match: Philippines 75 Jordan 70
- 5. Semi-finals: Australia 106 New Zealand 79, Iran 87 South Korea 81

About FIBA Asia Cup

- The 2017 FIBA Asia Cup (formerly known as the FIBA Asia Championship) was the 29th continental basketball championship in Asia.
- The tournament was organised by FIBA Asia and held in Lebanon.
- It took place from 8 to 20 August 2017.
- The Nouhad Nawfal Stadium hosted the tournament's matches.

Obituary

US comedian Jerry Lewis passed away

Multi-talented US actor and comedian Jerry Lewis has died. He was 91.

Key Points:

- Lewis was known for his slapstick humour and a lucrative decade-long partnership with Dean Martin.
- He starred in more than 45 films in a career spanning five decades.
- He was hailed as 'le Roi du Crazy' (the king of crazy) and inducted into the Legion of Honor, France's highest award, in 1984. He received a similar honour in 2006.