

NEWS TODAY

DEPARTMENT OF TELECOMMUNICATIONS (DOT) GIVES GO-AHEAD FOR 5G TECHNOLOGY AND SPECTRUM TRIALS

- DoT approved permissions to Telecom Service Providers (TSPs) for conducting trials for use and applications of 5G technology.

> 5G is the **5th generation** mobile network. It is a new global wireless standard after 1G, 2G, 3G, and 4G networks (Refer infographics).
 > It is meant to deliver **higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience** to more users.

- Also, TSPs are encouraged to conduct trials using **5Gi technology** in addition to the already known 5G Technology.

> Developed by IIT Madras and others, **5Gi technology facilitates much larger reach** of 5G towers and Radio networks.
 > **International Telecommunications Union (ITU)** has approved the 5Gi.
 • Chinese firms Huawei and ZTE will not be participating in the forthcoming trials as these were not marked on the priority list.

> Earlier, government had approved **National Security Directive on Telecommunication Sector** to declare a list of trusted sources and trusted products for installation in the country's telecom network.

3G vs 4G vs 5G

	3G	4G	5G
 Deployment	2004-05	2006-10	2020
 Bandwidth	2mbps	200mbps	>1gbps
 Latency	100-500 milliseconds	20-30 milliseconds	<10 milliseconds
 Average Speed	144 kbps	25 mbps	200-400 mbps

IOC BEGINS SUPPLY OF BIODIESEL MADE FROM USED COOKING OIL (UCO)

- This first supply of UCO based Biodiesel blended Diesel was flagged off under “**Expressions of Interest (EOI)**” Scheme.

> **EOI scheme for Procurement of Biodiesel produced from UCO** was initiated in 2019, with objective to create an ecosystem for collection and **conversion of UCO into Biodiesel and developing entrepreneurship opportunities**.

- Benefits of biodiesel made from UCO:** Cut reliance on imports, reducing carbon emissions, help to reach the target of 5% Biodiesel blending, help to divert the unhealthy used oil from the food chain to a more productive purpose.

> During frying, **several properties of oil are altered**, total polar compounds are formed on repeated frying. The toxicity of these compounds is **associated with several diseases such as hypertension, atherosclerosis, Alzheimer's disease, liver diseases**.

- National Policy on Biofuels 2018** envisages production of biofuel from UCO.

> FSSAI's **Repurpose Used Cooking Oil (RUCO) project** also aims collection of used cooking oil from vendors and food industry to produce biodiesel.

- Biodiesel includes methyl or ethyl ester of fatty acids derived from non-edible vegetable oil, acid oil, **used cooking oil**, animal fat and bio-oil.

EYEING RURAL COVERAGE, INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY OF INDIA(IRDAI) PITCHES FOR MODEL INSURANCE VILLAGES

- IRDAl has come out with **concept of model insurance villages to cover entire population in village areas**, with financial support of various institutions like Nabard and CSR funds.

> Idea is to offer **comprehensive insurance protection to all the major insurable risks that villagers are exposed** to and make available covers at subsidised cost.

- IRDAl suggested to implement it in a **minimum of 500 villages in the first year** and increase to 1,000 villages in subsequent years.

> It said efforts in selected villages need to be **continued for a minimum of 3 to 5 years** so as to make insurance benefits visible to the community.

- Economic Survey 2020-21** stated that **India's insurance penetration, which was at 2.71% in 2001, has steadily increased to 3.76% in 2019**, but stayed much below the global average of 7.23%.

• Insurance (amendment) Act, 2021 enhanced the **FDI limit in the insurance sector to 74%** from the existing 49%.

> Also, recently, IRDAl advised **all Insurance companies for issuance of Digital Insurance Policies via DigiLocker**.

○ Insurance penetration is calculated as the **percentage of insurance premium to GDP**, while insurance density is the **ratio of insurance premium to population**.

○ IRDAl is an **autonomous body** established under the **IRDAl Act 1999** for overall **supervision and development of the Insurance sector** in India.

○ Key objectives of IRDAl include **promotion of competition** so as to enhance customer satisfaction through increased consumer choice and fair premiums, while ensuring the financial security of the Insurance market.

ROADMAP 2030 FOR INDIA-UK FUTURE RELATIONS LAUNCHED DURING INDIA-UK VIRTUAL SUMMIT

- Roadmap 2030' was adopted to **elevate bilateral ties to a 'Comprehensive Strategic Partnership'**.

> It will pave the way for a deeper and **stronger engagement** over next ten years in **key areas of people-to-people contacts, trade and economy, defence and security, climate action and health**.

- Other key highlights of the summit**

> ‘Enhanced Trade Partnership’ (ETP) launched to unleash trade potential between **two and by setting an ambitious target of more than doubling bilateral trade by 2030**.

⇒ Both will also consider an **Interim Trade Agreement** for delivering early gains.

> **India-UK 'Global Innovation Partnership'** was announced that aims **to support the transfer of inclusive Indian innovations to select developing countries**, starting with Africa.

> Launched **comprehensive partnership on migration and mobility** to facilitate greater opportunities for the mobility of students and professionals between the two countries.

> Decided to expand cooperation under **Defence and International Security Partnership (DISP)** agreed in 2015,

> Enhanced India-UK engagement within the **Indian Ocean Rim Association (IORA)** framework as UK is a Dialogue Partner in IORA.

○ Britain is among the top investors in India and **India is the second-biggest investor** and a major job creator in Britain.

○ The two-way trade in 2019-20 was USD 15.4 billion dollars.

○ ETP is part of UK's efforts to ramp up trade ties with countries around world following its exit from the European Union.

28 STATES/ UTs START LIFTING FOOD GRAINS FROM FOOD CORPORATION OF INDIA DEPOTS FOR DISTRIBUTION UNDER PMGKAY-III

• Pradhan Mantri Garib Kalyan Ann Yojana (PMGKAY) has been reintroduced for two months (May and June) in the backdrop of resurgence of COVID-19.

➢ First phase of the PMGKAY was from April to June 2020 and second Phase was from July to November, 2020.

About PMGKAY

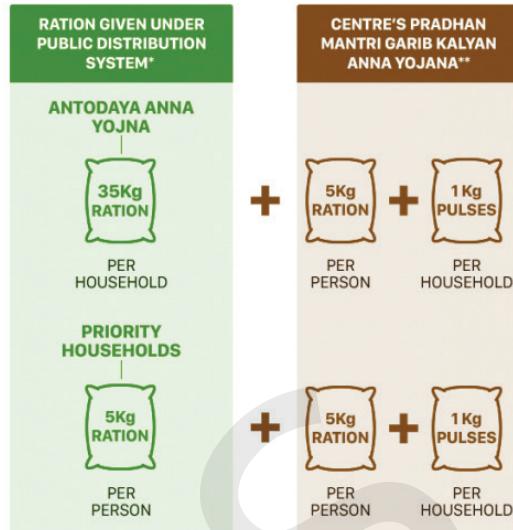
➢ PMGKAY was launched as a part of Atmanirbhar Bharat to supply free food grains to migrants and poor who faced hardship on the account of economic disruption caused by COVID-19 and Lock Down.

➢ Under PMGKAY, 5 kg free wheat/rice per month along with 1 kg free pulses via ration shops to 80 crore beneficiaries registered under National Food Security Act (NFSA).

➢ Additional grains given for free under PMGKAY to NFSA beneficiaries is over and above the existing monthly entitlement of 5 kg grains per person.

➢ Food grains under NFSA were to be made available at subsidized prices of Rs.3/2/1 per kg for rice, wheat and coarse grains respectively.

➢ Cost of free food grains distribution under the scheme is entirely being borne by Central government.



ALSO IN NEWS

Foreign exchange reserves	<ul style="list-style-type: none"> Reserve Bank of India bought 42 tonnes of gold in the last fiscal year to diversify forex assets. Foreign exchange reserves are assets held on reserve by a central bank in foreign currencies. These reserves are used to back liabilities and influence monetary policy. RBI's Forex reserve comprised of foreign currency assets, gold, Special Drawing Rights of International Monetary Fund (IMF), and reserve position in the IMF.
Social commerce	<ul style="list-style-type: none"> E-commerce transactions where buyers and sellers interact social media platform with each other before concluding a purchase is called as social commerce. According to a report, social commerce in India (in terms of gross merchandise value) was estimated at ~ US\$ 2 billion in 2020 and is projected to reach US\$ 16-20 billion by 2025 and US\$ 60-70 billion by 2030.
B.1.1.7 variant of COVID-19	<ul style="list-style-type: none"> Canadian researchers have published first structural images of a mutation in B.1.1.7 variant of COVID-19 virus. B.1.1.7 variant, first reported by World Health Organization in December, 2020 has an unusually large number of mutations (it may explain why the B.1.1.7 variant is more infectious). Cryo-electron microscopes (cryo-EM) was used to "visualise the detailed shapes of viruses and proteins. This imaging technology uses beams of electrons to picture the samples at liquid nitrogen temperatures.
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> A recent study concluded that Long-term exposure to NO₂ pollution can affect lung function and increase the risk of pulmonary disease. About NO₂ <ul style="list-style-type: none"> NO₂ is one of a group of highly reactive gases known as oxides of nitrogen or nitrogen oxides (NOx). NO₂ primarily gets in the air from the burning of fuel. NO₂ and other nitrogen oxides are also precursors for a number of harmful secondary air pollutants such as ozone and particulate matter, and play a role in the formation of acid rain.
Karen National Union (KNU)	<ul style="list-style-type: none"> Recently, Karen rebels seized army base near Thai border. It is Myanmar's oldest rebel group representing ethnic minority Karen communities in Karen, or Kayin, State, bordering Thailand. <ul style="list-style-type: none"> Karen National Liberation Army, the armed wing of the KNU, has been battling Myanmar's government since 1949. Its aim is self-determination for the Karen people in a region.
Places in news	<ul style="list-style-type: none"> Litani river, Lebanon: <ul style="list-style-type: none"> Tonnes of dead fish have washed up on the banks of Qaraoun lake on Lebanon's longest river, Litani. The disaster happened due to polluted waters. South China Sea (SCS) <ul style="list-style-type: none"> China's aircraft carrier task group recently conducted an exercise in SCS, which it described as routine training. SCS has seen overlapping territorial claims by Philippines, Vietnam, China, Brunei, Taiwan and Malaysia.
Personalities in news	<ul style="list-style-type: none"> Guru Tegh Bahadur <ul style="list-style-type: none"> 400th birth anniversary of Guru Teg Bahadur is being celebrated. He was the youngest son of Guru Hargobind Sahib, the sixth Sikh guru. He was 9th of 10 Sikh Gurus. His 115 hymns are included in Sri Guru Granth Sahib. In the year 1675, Guru Tegh Bahadur was executed in Delhi under the orders of the Mughal Emperor Aurangzeb. Satyajit Ray (May 2, 1921- 1992) <ul style="list-style-type: none"> He was a renowned filmmaker, writer, illustrator, graphic designer and music composer. His first film, Pather Panchali catapulted him into international fame. He was awarded Bharat Ratna, highest civilian award, in 1992. From this year, Satyajit Ray Lifetime Achievement Award for Excellence in Cinema' has been instituted to be given at the International Film Festival of India (IFFI).