

### THE STATUS OF EVTOL: A SOON TO BE REALITY?

- Government of India is exploring the possibility of inviting manufacturers of **Electric Vertical Take off and Landing (eVTOL)** aircraft to set up base in India, .
- While speaking at “**India@2047**” **conclave**, the Union Civil Aviation Minister, Jyotiraditya Scindia said that India is in ‘conversation’ with several eVTOL players who were ‘keen on setting up production centres’ in the country, implying a futuristic vision for India.

### Market scenario

- The **global market** for eVTOL aircraft is estimated to be **USD 8.5 billion in 2021** and is projected to reach **USD 30.8 billion by 2030**.
- The urban air mobility (**UAM**) **market** is expected to expand at a compound annual growth rate of 25% between 2018-25. By 2025, it is anticipated to be a **\$74 billion**
- This includes the eVTOLs market since UAM ideally focuses on the use of eVTOLs.

### Background

- Current ground-based transportation systems are subjected to various challenges, including the high cost of infrastructure development, limited land space, and a growing urban population.
- Therefore, the automotive and aviation industries are collaborating to develop flying cars, also known as electric, vertical, takeoff, and landing aircrafts (eVTOLs).
- These eVTOLs will allow for rapid and reliable urban and suburban transportation.
- eVTOLs have been likened to “**a third wave in an aerial revolution**”; the first being the advent of commercial flying, and the second, the age of helicopters.

### About eVTOL aircraft

- **Definition:** eVTOL uses electric power to hover, take off, and land vertically instead of conventional fossil fuels. They are powered by batteries, although some designs use hydrogen fuel cells.



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- **Description:** It is a **low-altitude** urban air mobility aircraft capable of carrying only a few passengers- six seaters and eight seaters.
- **Applications:** Air Taxi, Delivery, Medical assistance (EMS), Cargo Transport, Recreation.
- **Launch:** Israeli startup has recently introduced a full-scale prototype of an eVTOL, to be used as a personal flying car.
- **Scope:** In the near future, these eVTOLs will enhance “**on-demand**” mobility for intra- and intercity transportation, improving connectivity between metropolitan city centers and airports.

## Advantages of eVTOL

- eVTOL is depicted as being “**a runway independent technological solution**” for the globe’s transportation needs.
- It opens up **new possibilities** which aircraft with engines cannot carry out in areas such as manoeuvrability, efficiency and even from the environmental point of view.
- **Cost Effective:** eVTOL is cost efficient as there will be no requirement of runway and other infrastructure in air transport. They are also vastly cheaper than helicopters
- **Curtail GHG emission:** According to the Air Transport Air Group (ATAG), global aviation produces around 2% CO2 emissions. eVTOL being electric powered aircraft does not require fossil fuels, thus limiting greenhouse gas emission and fulfilling the climate change commitment.
- **Prevent vehicular congestion:** Urban air mobility (air taxi) will reduce road traffic
- **Upgradation of electric mobility technology:** eVTOL may push for new Investments, research and development in electric vehicles technology in India.

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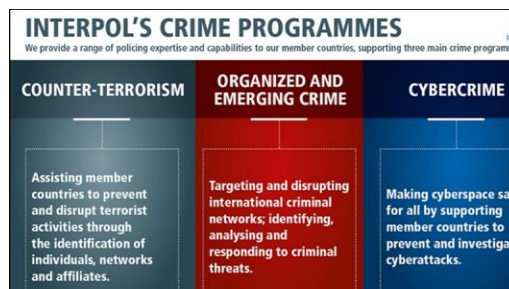
## PLANS AFOOT FOR 90TH INTERPOL ANNUAL MEET

- Preparations are afoot for the 90th Interpol General Assembly that is to be held in the Indian capital later this year.
- The arrangements for the event are being made by the Central Bureau of Investigation (CBI) in coordination with other government agencies.

## In Focus: Interpol

- Full Name - International Criminal Police Organisation.
- Interpol is the radio-telegraph code for the organisation.
- Interpol is an international police organisation made up of 195 member countries.
- It does not work under UN.
- It has enjoyed a special role – that of Permanent Observer at the United Nations - since 1996.
- It was founded in 1923 and is headquartered at Lyon, France.

## Functions



- It is not a police force in the traditional sense—its agents are not able to arrest criminals.
- It is more of an information-sharing network, providing a way for national police forces to co-operate effectively.
- Tackle international crime ranging from human trafficking and terrorism to money laundering and illegal art dealing.
- Sharing of information is done by issuing colour-coded notices in four languages - English, Spanish, French, and Arabic.
- The organization operates centralised criminal databases that contain fingerprint records, DNA samples and stolen documents.

## Types of Interpol Notices

- Interpol issues different types of notices which have different objectives.
- Types of notices issued – Red, Blue, Yellow, Black, Orange, Purple, Green etc.
- States are not obliged to follow these notices, but will often treat them as a warrant for someone's arrest and extradition.



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TYPES OF INTERPOL NOTICES	
 <b>RED NOTICE:</b> To seek the location and arrest of wanted persons with a view to extradition or similar lawful action.	 <b>YELLOW NOTICE:</b> To help locate missing persons, often minors, or to help identify persons who are unable to identify themselves.
 <b>BLUE NOTICE:</b> To collect additional information about a person's identity, location or activities in relation to a crime.	 <b>BLACK NOTICE:</b> To seek information on unidentified bodies.
 <b>GREEN NOTICE:</b> To provide warnings and intelligence about persons who have committed criminal offences and are likely to repeat these crimes in other countries.	 <b>ORANGE NOTICE:</b> To warn of an event, a person, an object or a process representing a serious and imminent threat to public safety.
 <b>INTERPOL-UN SECURITY COUNCIL SPECIAL NOTICE:</b> Issued for groups and individuals who are the targets of UN Security Council sanctions committees.	 <b>PURPLE NOTICE:</b> To seek or provide information on modus operandi, objects, devices and concealment methods used by criminals.

## Interpol General Assembly

- The General Assembly is Interpol's supreme governing body, and comprises representatives from all its member countries.
- It meets annually for a session lasting approximately four days, to vote on activities and policy. It takes decisions in the form of resolutions.

## India and Interpole

- India has been a member since 1956.
- Like any member nation, India maintains a National Central Bureau (NCB). The NCB is the designated contact point for the Interpol.
  - In India's case, The CBI is the designated nodal body for the Interpol.
  - NCB serves as the national platform for cooperation between domestic law enforcement units and the international police community.
- India has collaborated with the Interpol in tackling a myriad of organised crimes such as poaching, wildlife trafficking, spurious drugs and fake medicine rackets, etc.
- India will host the Interpol General Assembly in 2022 as part of celebrations of the 75th anniversary of Indian Independence.

## FRENCH OPEN (TENNIS)

In French Open tennis, Spaniard Rafael Nadal has won the 14th singles title of the tournament beating Casper Ruud of Norway 6-3, 6-3, 6-0 in the final.



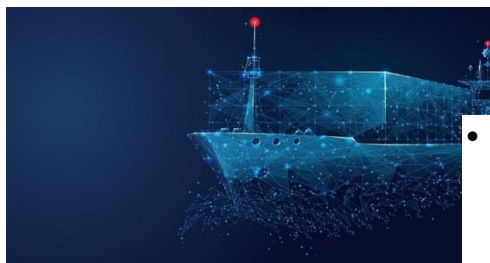
### About:

- With this victory, 36-year-old Nadal has become the oldest champion at Roland Garros. It is his 22nd Grand Slam title.
- In women's singles, World Number One Tennis player Iga Swiatek clinched this year's title by beating US teenager Coco Gauff in Paris last evening. The 21-year-old polish player won her second Grand Slam title in straight sets 6-1, 6-3 over Gauff who was making her first final appearance at the clay-court Slam.

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## DARK SHIPPING

As the Quad grouping looks to track and address illegal, unreported and unregulated (IUU) fishing in the Indo-Pacific, an ambitious effort to install the satellite-based Vehicle Monitoring System (VMS) for small fishing vessels (less than 20 metres) across the country's coastline is still to be rolled out.



### About:

- Despite pilot studies being conducted, the project, conceived in the aftermath of the 26/11 Mumbai attacks, remains stuck primarily due to two reasons.
- Fishermen don't want to get tagged as they do not want any of their illegal activities recorded and they are sceptical that others will get to know of where there is good catch. Second is that fishing is a State subject and there are local politics involved.

- There is no legislation to force fishermen to install the transponders and efforts by the Ministry of Fisheries to table the Indian Marine Fisheries Bill, 2021 which covers this has repeatedly been delayed due to the opposition from the States and fishermen.
- The Quad grouping, comprising India, Australia, Japan and the U.S., announced at the Tokyo summit last month an ambitious Indo-Pacific Maritime Domain Awareness (IPMDA) initiative to track “dark shipping” and to build a “faster, wider, and more accurate maritime picture of near-real-time activities in partners’ waters” integrating three critical regions in the Indo-Pacific.
- The Automatic Identification System (AIS) is for bigger ships, which was made compulsory for all vessels above 20 metres after 26/11 by the National Committee on Strengthening Maritime and Coastal Security (NCSMCS).

## 10% ETHANOL BLENDING

India has achieved the target of 10% ethanol blending in petrol, five months ahead of schedule, Prime Minister Narendra Modi said.

### Aiming for an eco boost

Oil industry experts have allayed fears over mixing ethanol with petrol and say it cannot damage engines

- Ethanol is a bio-fuel obtained primarily from sugarcane. Blending of ethanol with petrol reduces dependence on fossil fuel and helps the environment

- The government had set a target of 10% of ethanol per litre of petrol

- Ethanol is blended through a separate pumping and metering mechanism

- Once blended, ethanol cannot be separated from petrol

Since ethanol can absorb moisture from the atmosphere, dealers say it can cause issues with vehicle engines



### About:

- This, he claimed, had led to a reduction of 27 lakh tonnes of carbon emissions and saved foreign exchange worth ₹41,000 crore. Farmers earned ₹40,600 crore in the past eight years due to increase in ethanol blending, Mr. Modi said.
  - Last June, Mr. Modi made public the “Road map for ethanol blending in India, 2020-25”, which laid out a pathway for achieving 20% ethanol blending by 2025-26.
- The 10% blending target was to be achieved in November 2022.

## EXERCISE SAMPRITI-X

As part of the ongoing India Bangladesh bilateral defence cooperation, a joint military training exercise Ex SAMPRITI-X is being conducted at Jashore Military Station in Bangladesh from 05 June to 16 June 2022.



#### About:

- Exercise SAMPRITI is an important bilateral defence cooperation endeavour conducted alternately by both countries which aims to strengthen and widen the aspects of interoperability and cooperation between both the armies.
- During the joint military exercise Ex SAMPRITI-X, armies of both the Nations will share expertise in multiple simulated scenarios of Counter Terrorism, Humanitarian Assistance & Disaster Relief and UN Peacekeeping Force under UN mandate.

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## CORBEVAX

The Drug Controller General of India (DCGI) has approved Hyderabad-based Biological E. Limited (BE)'s COVID-19 vaccine Corbevax as a COVID-19 booster dose.



#### About:

- The vaccine can be administered to adults six months after the administration of second dose of Covaxin or Covishield for restricted use in emergency situations.
- Corbevax is India's first approved heterologous COVID booster (when the third dose is different from earlier doses), the company said.
- Clinical trial data showed that Corbevax booster dose provided significant enhancement in immune response and good safety profile required for an effective booster.