



# PIB, THE HINDU Newspaper and Editorial Current Affairs

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## Man Portable Anti Tank Guided Missile

### Why in news?

In a major boost for Army, Defence Research and Development Organisation (DRDO) successfully test fired indigenously developed, low weight, fire and forget Man Portable Anti-Tank Guided Missile (MPATGM).

### Highlights:

- Man-portable anti-tank systems (MANPATS or MPATS) are shoulder-launched anti-tank rockets. They are typically unguided weapons and are a threat to armored vehicles, low-flying aircraft (especially helicopters), and field fortifications.
- Generally MANPATS fall into three distinct categories. The first consist of a small, disposable preloaded launch tube firing a high explosive anti-tank warhead operated by a single soldier.
- The second is a firing system onto /into which a rocket is loaded, operated by a single soldier. The third are manufactured prepacked and issued as a single unit of ammunition with the launcher discarded after a single use.
- MPATGM is fitted with high-explosive anti-tank (HEAT) warhead. MPATGM has a top attack capability and has a maximum engagement range of about 2.5 kilometres. MPATGM capable of being fired from the shoulder and can be used during day and night.

## **List of anti-tank missiles in India:**

### **1. DRDO Anti Tank Missile**

The DRDO Anti-tank missile (ATM) is a first generation wire-guided missile developed in India by Defence Research and Development Laboratory (DRDL) of Defence Research and Development Organisation (DRDO). It has a subsonic speed up to 300 ft/s (91 m/s) with a range of 1.6 km and carries a 106 mm HEAT warhead.

### **2. Amogha missile**

- Amogha-1, is a second generation, Anti-Tank Guided Missile which has pin point accuracy for a range up to 2.8 km. It is under development by Bharat Dynamics at Hyderabad. It has also become the first missile designed and tested by the Bharat Dynamics Ltd company.
- The missile will be produced in two versions. The land version has already been tested. The IR version of the missile uses a thermal intelligent vision and then attacks the target.
- Missile guidance is conducted by centroid tracking and Terminal homing. The missile moves near the target in a parabolic path and does not follow a completely parabolic path like conventional projectiles. It then bends at a steep angle and to attack on the target.

### **3. Nag**

- The Nag missile is an Indian third generation "fire-and-forget" anti-tank guided missile. It is an all weather, top attack missile with a range of 3 to 7 km.
- It is being developed by India's Defence Research and Development Organisation (DRDO) under the Integrated Guided Missile Development Program and is manufactured by Bharat Dynamics Limited.
- As of 2017, the Nag missile is solely operated from the NAMICA ATGM carrier, a tank destroyer based on the BMP-2 platform.
- The Nag missile costs about \$500,000 USD per unit and has a single-shot hit probability of 0.77. The Nag missile has been described as "long-delayed" and as of 2018 it has not yet entered service.

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## **Exercise Sampriti - 2019**

### **Why in news?**

Exercise Sampriti-VIII, a joint Indo-Bangladesh military exercise which witnessed participation of a company group of 9th Battalion the Rajputana Rifles from the Indian Army and the Company of 36 East Bengal Battalion, Bangladesh Army concluded at Tangail, Bangladesh on 14 March 2019.

### **Highlights:**

- The exercise was the 8th edition in the Sampriti series, which started in 2009. Exercise Sampriti strengthens and broadens interoperability and cooperation between the Indian and Bangladesh Armies.
  - It is the fourth Indo-Bangladesh exercise at Tangail, Bangladesh and compliments number of other exchanges and exercise between the two forces.
  - The commanders and staff officers of both sides were exercised to work in close coordination to receive and collate intelligence and to issue suitable operational orders to the joint field training components who executed these orders on ground in simulated realistic situations.
  - The joint training culminated in a validation exercise conducted at Bangabandu Senanibas Cantonment, Tangail in which subunits of both armies executed the plans.
  - The validation exercise was reviewed by senior officers from both sides. Besides training, both contingents also participated in a number of activities including friendly volleyball and basketball matches.
  - A magnificent parade and the customary exchange of mementos marked the successful completion of Indo-Bangladesh joint exercise.
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## **India Energy Modelling Forum**

### **Why in news?**

The NITI Aayog and the United States Agency for International Development (USAID) organized the first workshop on development of the India Energy Modelling Forum (IEMF), which has been envisaged as a pan-stakeholder platform for debating ideas, scenario-planning & discussing the India's energy future.

### **About IEMF:**

- The IEMF seeks to provide a platform for leading experts and policy makers to study important energy and environmental issues and ensure induction of modelling and analysis in informed decision making process.
- The Forum aims to improve cooperation and coordination between modeling teams, the Government of India, knowledge partners and think-tanks, build capacity of Indian institutions, and identify issues for joint modeling activities and future areas of research.

### **Forum Highlights:**

- Discussions on energy modelling in India and the world explored how energy modelling can play an important role in decision-making.
- The panelists particularly laid focus on bridging the rural-urban divide and factoring in energy pressures from the informal economy within models.
- There was a need expressed to ensure that holistic perspective of energy consumption and ground realities must be inducted to produce practical and feasible energy models, converging land and water use patterns within energy models.
- Deliberations included a spotlight on how the impact of the evolving character of India's cities, industries and especially the transport sector should be included in the any India-centric models.

- The shift towards electric mobility, an increasing emphasis on mainstreaming of renewable energy options and overarching environmental concerns were also stated as key factors for determining India's energy future.
  - The session featuring representatives of key central government ministries laid special emphasis on ensuring social, environmental and economic costs of energy production and consumption are accurately calculated to future-proof decision making and policy planning.
  - The workshop included extensive discussions about the framework of an India Energy Modelling Forum and its institutional, coordination and funding mechanisms.
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## **West Nile Virus**

### **Why in news?**

A section of the media has reported that a seven year old boy from Malappuram District of Kerala is suffering from a West Nile Virus (WNV), a mosquito-borne disease, mostly reported in the continental United States.

### **About West Nile Virus:**

- West Nile virus (WNV) is a single-stranded RNA virus that causes West Nile fever. It is a member of the family Flaviviridae, specifically from the genus Flavivirus, which also contains the Zika virus, dengue virus, and yellow fever virus. West Nile virus is primarily transmitted by mosquitoes, mostly species of the genus Culex, but ticks have also been found to carry the virus, although it is exceptional and they are not likely to play a major role in the transmission of WNV. The primary hosts of WNV are birds, so that the virus remains within a "bird-mosquito-bird" transmission cycle.

## **Disease:**

- West Nile virus causes an infection called West Nile fever. Approximately 80% of infected people have few or no symptoms, around 20% of people develop mild symptoms, such as fever, headache, vomiting, or a rash, while less than 1% of people develop severe symptoms, such as encephalitis or meningitis with associated neck stiffness, confusion, or seizures.
- The risk of death among those in whom the nervous system is affected is about 10%.. Recovery may take weeks to months.
- The virus is typically spread by infected mosquitoes. Mosquitoes become infected when they feed on infected birds.
- Rarely the virus is spread through blood transfusions, organ transplants, or from mother to baby during pregnancy, delivery, or breastfeeding.
- It otherwise does not spread directly between people. Risks for severe disease include age over 60 and other health problems. Diagnosis is typically based on symptoms and blood tests.

## **Prevention**

- There is no human vaccine. The best method to reduce the risk of infections is avoiding mosquito bites.
- This may be done by eliminating standing pools of water, such as in old tires, buckets, gutters, and swimming pools. Mosquito repellent, window screens, mosquito nets, and avoiding areas where mosquitoes occur may also be useful.
- While there is no specific treatment, pain medications may be useful.

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## **Eco-Sensitive Zone**

### **Why in news?**

Bannerghatta National Park's Eco-Sensitive Zone (ESZ), which provides a regulated buffer zone around protected areas, will remain at 168.84



sq.km. despite thousands of citizens formally objecting to the reduction of nearly 100 sq. km. as compared to the original proposal.

### **Contentious issue:**

- In the 33rd ESZ Expert Committee meeting of the Ministry of Environment and Forests (MOEF) held on February 28, members recommended finalisation after 'detailed deliberations' of the November 5 draft notification which declared an ESZ area of 168.84 sq.km. around Bannerghatta National Park.
- A 37% reduction from the first draft notification issued in 2016 which had marked an ESZ area of 268.9 sq.km.
- The new ESZ will range from 100 metres (towards Bengaluru) to 1 kilometre (in Ramanagaram district) from the periphery of the protected area. The ESZ Committee estimates that between 150 and 200 elephants were observed at BNP.
- During the meeting, members of the expert committee discussed extending the area of the proposed ESZ towards Bengaluru city.
- There is a Supreme Court ruling prohibiting quarrying and mining activities within 1km of a protected areas irrespective of the ESZ distance. Since this safe zone is applicable, the objections couldn't hold.
- MoEF accepted the State government's position, which is derived from a cabinet sub-committee formed to look into delineation of ESZs in 31 protected areas of the State. In 2015, the State government approved the sub-committee report that reduced ESZ in multiple areas as it 'may hinder developmental activity' and was opposed by locals.

### **About Eco-Sensitive Zone:**

- Eco-Sensitive Zones (ESZs) or Ecologically Fragile Areas (EFAs) are areas notified by the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India around Protected Areas , National Parks and Wildlife Sanctuaries.
- The purpose of declaring ESZs is to create some kind of "shock

absorbers” to the protected areas by regulating and managing the activities around such areas. They also act as a transition zone from areas of high protection to areas involving lesser protection.

### **Statutory backing:**

- The Environment (Protection) Act, 1986 does not mention the word “Eco-Sensitive Zones”. However, Section 3(2)(v) of the Act, says that Central Government can restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards.
- Besides Rule 5(1) of the Environment (Protection) Rules, 1986 states that central government can prohibit or restrict the location of industries and carrying on certain operations or processes on the basis of considerations like the biological diversity of an area, maximum allowable limits of concentration of pollutants for an area, environmentally compatible land use, and proximity to protected areas. The above two clauses have been effectively used by the government to declare ESZs or EFAs.
- The same criteria have been used by the government to declare No Development Zones. Time to time, the Ministry of Environment, Forests and Climate Change (MoEFCC) approves a comprehensive set of guidelines laying down parameters and criteria for declaring ESZs.
- A committee constituted by MoEF puts this together. The guidelines lay out the criteria based on which areas can be declared as ESZs. These include Species Based (Endemism, Rarity etc), Ecosystem Based (sacred groves, frontier forests etc) and Geo-morphologic feature based (uninhabited islands, origins of rivers etc).

### **Extent of ESZ**

- An ESZ could go up to 10 kilometres around a protected area as provided in the Wildlife Conservation Strategy, 2002.
- Moreover, in case where sensitive corridors, connectivity and ecologically important patches, crucial for landscape linkage, are beyond 10 kilometres width, these should be included in the Eco-



Sensitive Zones.

- Further, even in the context of a particular Protected Area, the distribution of an area of ESZ and the extent of regulation may not be uniform all around and it could be of variable width and extent.
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## **Electoral bonds**

### **Why in news?**

Government of India defends electoral bonds scheme in Supreme Court.

### **What is it?**

An electoral bond is designed to be a bearer instrument like a Promissory Note — in effect, it will be similar to a bank note that is payable to the bearer on demand and free of interest. It can be purchased by any citizen of India or a body incorporated in India.

### **How do you use it?**

- The bonds will be issued in multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore and will be available at specified branches of State Bank of India. They can be bought by the donor with a KYC-compliant account.
- Donors can donate the bonds to their party of choice which can then be cashed in via the party's verified account within 15 days.

### **What are the other conditions?**

- Every party that is registered under section 29A of the Representation of the Peoples Act, 1951 (43 of 1951) and has secured at least one per cent of the votes polled in the most recent Lok Sabha or State election will be allotted a verified account by the Election

Commission of India. Electoral bond transactions can be made only via this account.

- The bonds will be available for purchase for a period of 10 days each in the beginning of every quarter, i.e. in January, April, July and October as specified by the Central Government. An additional period of 30 days shall be specified by the Central Government in the year of Lok Sabha elections.
- Electoral bonds will not bear the name of the donor. In essence, the donor and the party details will be available with the bank, but the political party might not be aware of who the donor is.
- The intention is to ensure that all the donations made to a party will be accounted for in the balance sheets without exposing the donor details to the public.

### **Will it be tax deductible?**

During the Budget presentation in February 2017, the Finance Minister had proposed that the maximum amount of cash donation that a political party can receive be capped at Rs.2,000 and that parties be entitled to receive donations by cheque or digital mode, in addition to electoral bonds.

### **Background:**

- Electoral Bond is an effort made to cleanse the system of political funding in India. The scheme of electoral bonds addresses the concerns of donors to remain anonymous to the general public or to rival political parties.
- From the bonds, no details of the donor nor of the intended political beneficiary can be made out. So electoral bond cannot be identified or associated with any particular buyer or political party.
- However, some security features are encoded into the bonds to avoid issuance of fake /forged bonds. These include a random serial number invisible to the naked eye.
- However, the number is not noted by the SBI in any record associated with buyer or political party depositing a particular electoral bond. The number is not being used or can be used to track the donation or

the buyer.

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