Standardized Development and Building Regulations, 2023

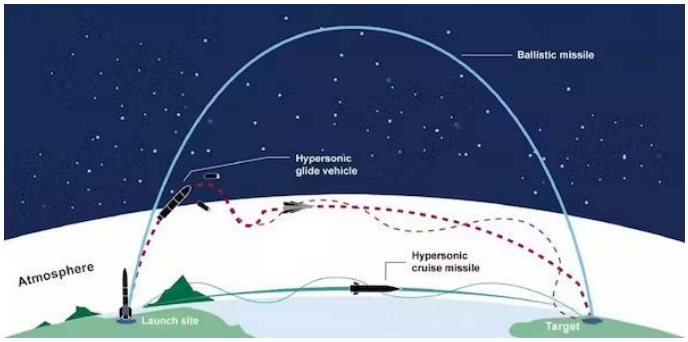
Context: *The 'Standardized Development and Building Regulations, 2023' have been released by the Bureau of Indian Standards, presented in Special Publication SP 73: 2023.*

- The Bureau of Indian Standards has recently issued the 'Standardized Development and Building Regulations, 2023,' encapsulated in Special Publication SP 73: 2023.
- These regulations are aligned with the National Building Code of India 2016 (NBC 2016) and draw inspiration from global best practices.
- **Aim and Framework:**
  - The regulations set forth a comprehensive framework aimed at ensuring safety, accessibility, and sustainability in construction.
  - The document aims to ensure uniformity, streamline structuring and detailing of development and building regulations across states, union territories (UTs), and local bodies.
- **Genesis and Development:**
  - The genesis of these Standardized Regulations lies in a meticulous project aimed at promoting the adoption of NBC 2016 nationwide.
  - The initiative involved an exhaustive study of existing rules and regulations across the country, coupled with a comparative analysis of international best practices governing land and building development.
  - Workshops and discussions held nationwide gathered input and feedback, successfully integrated into the final document.
  - The user-friendly approach eliminates ambiguity, ensuring a seamless adoption process.
- **User-Friendly Features:**
  - Crafted in plain language for clarity, the regulations facilitate easy understanding, eliminating ambiguity.
  - The comprehensive content, complemented by various forms and checklists, facilitates easy understanding.
  - Visual aids, including illustrations and flowcharts, enhance comprehension.
  - Explanatory notes underscore key aspects, and standardized numbering eases translation into different languages.
- **Key Stakeholders:**
  - Key beneficiaries include the Ministry of Housing and Urban Affairs (MoHUA), Town and Country Planning Organization (TCPO) under MoHUA, state and union territory governments, local bodies (LBs), both urban and rural, development authorities (DAs), cantonment boards and port trusts, and Zila and Gram Panchayats.
- **Accessibility Measures:**
  - The structuring of chapters follows the development process, making the document a cogent continuous volume.
  - Explanatory notes outlined at the beginning of each chapter brief users about the contents therein.
  - Items, clauses, sub-clauses, tables, figures, annexes, etc., have been duly numbered in a standardized manner.
  - Visual aids such as figures and flowcharts enhance interpretation visually.
  - The regulations are written to ensure no room for multiple interpretations, and notes clarify possible ambiguities.
  - Key provisions of NBC 2016 related to safety, sustainability, and accessibility have been specifically incorporated.
  - Latest developments and advancements in the field have also been addressed considering available guidelines and regulations.
- **Envisioned Future Impact:**
  - The document envisions a future where regulatory bodies operate more transparently and efficiently.
  - It proposes ways in which regulatory bodies can harness common rules and regulations to collect verifiable data, leveraging Information Technology for efficient service delivery.
  - These regulations anticipate a positive impact on the ease of doing business, laying the groundwork for a resilient and sustainable built environment in India.

Hypersonic Missiles

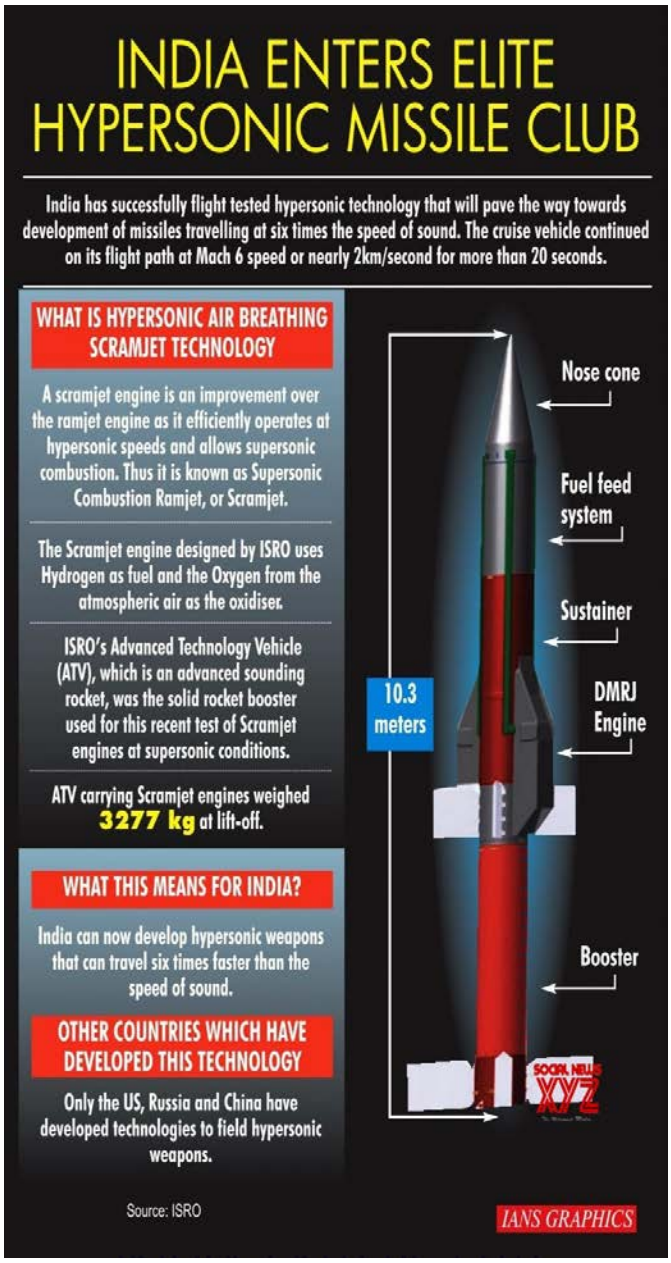
Context: *North Korea tested a new intermediate-range solid-fuel hypersonic missile, joining the global race for advanced, hard-to-detect long-range rockets.*

- **What is Hypersonic?**
  - Describing a vehicle as hypersonic implies it flies much faster than the speed of sound, which is 761 mph at sea level.
  - Passenger jets typically travel just under 600 mph, while hypersonic systems operate at speeds of 3,500 mph and higher, approximately 1 mile per second.
  - Hypersonic systems have been in use since 1962, notably when John Glenn re-entered Earth's atmosphere from the first U.S. crewed flight around the Earth.
  - All intercontinental ballistic missiles (ICBMs) in the world's nuclear arsenals are hypersonic, reaching speeds of about 15,000 mph or about 4 miles per second at their maximum velocity.
  - Unlike ICBMs, the new generation of hypersonic missiles does not fly as fast but is launched on smaller rockets that keep them within the upper reaches of the atmosphere.



➢ **Types of HSVs:**

- **Hypersonic Glide Vehicle (HGV):** Missile warheads maneuver and glide through the atmosphere at high speeds after an initial ballistic launch phase.
- **Hypersonic Cruise Missile:** Cruise missiles use air-breathing engines, like scramjets, to achieve high speeds.
- **Hypersonic Aircraft:** Utilizes air-breathing engines, such as scramjets, for high-speed travel.
- **Guns Firing Cannon-Launched Guided Projectiles:** Involves traditional artillery or innovative technologies like railguns.
- **Ballistic Missiles:** Travel at high speeds during atmospheric reentry.
- **Hypersonic Air-to-Air Missile (AAM):** AAMs use air-breathing engines, like scramjets, to intercept air targets, exemplified by Vympel R-37.



NEWS IN BETWEEN THE LINES

Solar Boat

First time in India, solar power-enabled boat to be launched on Saryu river in Ayodhya.

About Solar Boat:

- A solar boat is a boat that **uses solar panels** and **storage batteries to convert sunlight into electrical power**.
- The electric motors and batteries are charged by the solar panels and **photovoltaic cells**, which can significantly reduce or eliminate the use of fossil fuels.
- It is **silent with clean engine and zero emissions**.
- It also eliminates the shaking, rattling and stench of fuel associated with gas engines.
- It is an environmentally-friendly passenger water transportation that does not cause air, sound or water pollution.
- In **1838, Professor Moritz Jacobi in Russia** experimented with a 24' long, electrically propelled boat.
- In **1880, Gustav Trouve, a Paris chemist**, invented a removable electrical Aussenborder.

The India International Science Festival

Recently it has been announced by the Ministry of Science and Technology that the India International Science Festival (IISF) 2023 is set to begin from today.

The India International Science Festival:

- The India International Science Festival (IISF) 2023 will take place from **January 17 to January 20, 2024.**
- The aim of this science festival is to **celebrate the achievements of India in the frontier areas of science and technology.**
- It is the **9th Inida International Science Festival** and will take place at the **Regional Biotechnology Centre in Faridabad, Haryana**.
- The central theme of IISF 2023 is "**Science and Technology Public Outreach in Amrit Kaal."**
- **22 countries are participating**, including the USA, UK, Japan, Germany, Australia, and others.
- The host institute for IISF 2023 is the **Regional Centre for Biotechnology (RCB) – Translational Health Science and Technology Institute (THSTI)** located in Faridabad, Haryana.

Pakke Paga Hornbill Festival

Recently it has been announced that the 9th edition of the Pakke Paga Hornbill Festival will take place at Seijosa in the Pakke Kessang district of Arunachal Pradesh from January 18-20, 2024.

About Pakke Paga Hornbill Festival:

- The Pakke Paga Hornbill Festival (PPHF) is a **three-day festival** held annually in Arunachal Pradesh to support wildlife and nature conservation.
- It has been celebrating as the **state festival of Arunachal Pradesh since 2015**.
- The theme of the Pakke Paga Hornbill Festival 2024 is **Domutoh Domutoh, Paga hum Domutoh meaning 'Let Our Hornbills Remain' in the Nyishi language.**
- The festival is focused on hornbill conservation and represents the hornbill, a bird that the Naga have revered for centuries.
- The festival's objectives include recognizing the role of the **Nyishi tribe** in conserving hornbills and devising alternative sources of income for the region.
- It is a conservation festival in Arunachal Pradesh that promotes wildlife and nature conservation.

Place in News

Nauru

Recently, Nauru announced to recognise the People's Republic of China under one-China principle and breaks the diplomatic ties with the Taiwan authorities.

Nauru (Capital: Yaren)

Location: Nauru, a part of **Micronesia** is the **world's smallest republic** and the **third-smallest country in the world,** located in the northeast of Australia.

Boundaries:

- This island is **surrounded by a fringing coral reef**, which is exposed at low tide and dotted with pinnacles.
- Neighbouring islands territories are **Kiribati Solomon, and Banaba.**

Physical Features:

- **Command Ridge** is the highest point in Nauru.
- Nauru is composed of of phosphate rock in the Pacific Ocean.
- The climate of Nauru **is hot and very humid** throughout the year because of its proximity to the equator and the ocean.

Personality in News

Thiruvalluvar

Recently on the occasion of Thiruvalluvar Day, Tamil Nadu Governor revived a controversy by paying floral tributes to a portrait of Tamil poet-saint Thiruvalluvar in saffron robes and describing him as a saint of the 'Bharatiya Sanatan' tradition.

Thiruvalluvar:

- Thiruvalluvar Day is celebrated annually on January 15th or 16th in Tamil Nadu as part of **Pongal (or Sankranti) celebrations**.
- The first Thiruvalluvar Day was celebrated on May 17 and 18 in **1935**.
- Thiruvalluvar, also **known as Valluvar**, was a **Tamil poet-saint** and philosopher.
- He is considered a cultural and moral icon for Tamils across religious and caste lines.
- He is best known for authoring the **Tirukkuṟaḷ** or **Kural**, a **collection of couplets on ethics**, love and political and economic matters.
- The text is considered a highly regarded work of Tamil literature.
- Thiruvalluvar's primary and famous work is **Thirukkural**, which has **1,330 couplets**.
- The couplets are divided into **133 sections of 10 couplets each**.
- The text is further divided into three parts: **dharma, artha, and kama.**

Personality in News

K.B. Sreedevi

K.B Sreedevi (1st May 1940-16th January 2024)

K.B Sreedevi, a noted Malayalam writer was born at Vellakattumana in Malappuram, Kerla.

Contributions:

- K.B Sreedevi published many novels and short stories through publications like **Ezhuthachan Masika**, **Jayakeralam** and **Mathrubhumi**.
- She **founded a Mahila Samajam** (group of women) for the upliftment of women and children, the group had more than 100 members.
- Her novel **Yajnam** had won the **Kungumam award in 1974**.
- Her granddaughter Ranjana K. had made a short film based on Yajnam.

Awards and Honours:

- She had won the **Kerala Sahitya Akademi Award** for her contribution to literature.
- She also won the **Kerala State Film Award** for best story for Niramala in **1976**.
- She was awarded by **Deviprasadam Trust Award, 2009**

POINTS TO PONDER

- From which Indian state does the Punganur Cow, recently in the news, originate? **- Andhra Pradesh**
- What category of missile is the ASTRA Missile, making recent headlines? **- Air-to-air Missile**
- When is 'Indian Army Day' observed annually in India? **– 15th January**
- Which state has recently been granted a Geographical Indication (GI) tag for Kachchhi Kharek (dates)? **– Gujarat**
- Sinomicrurus gorei, making recent headlines, is associated with which species? **– Snake**