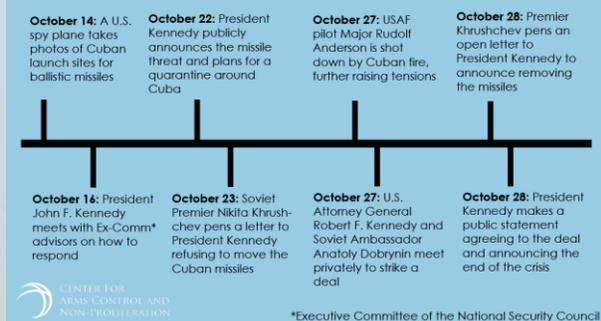


Global nuclear order

- The global nuclear order (GNO) was no exception but, today, it is under strain.
- The GNO was created in the shadow of the Cold War, with the U.S. and the U.S.S.R., leading the western and the Socialist blocs, respectively.
- Following the 1962 Cuban Missile Crisis, when the two came perilously close to launching a nuclear war, both U.S. President John F. Kennedy and General Secretary Nikita Khrushchev understood two political realities.

THE CUBAN MISSILE CRISIS TIMELINE



- First, as the two nuclear superpowers, they needed bilateral mechanisms to prevent tensions from escalating to the nuclear level.
- And, second, nuclear weapons are dangerous and, therefore, their spread should be curbed. This convergence created the GNO. The third element of the global nuclear order came into existence in 1975.

- India had chosen not to sign the NPT, and in 1974, stunned the world by conducting an underground peaceful nuclear explosive, or PNE
- Today's nuclear world is no longer a bipolar world. The U.S. faces a more assertive China, determined to regain influence, regionally and globally.
- This rivalry is different from the Cold War because both economies are closely intertwined and further, and China is an economic and technological peer rival.
- Changing geopolitics has taken its toll on the treaties between the U.S. and Russia.
- In 2002, the U.S. withdrew from the Anti-Ballistic Missile (ABM) Treaty and in 2019, from the Intermediate Range Nuclear Forces (INF) Treaty on grounds that Russia was violating it.
- The only remaining agreement, New START, will lapse in 2026; its verification meetings were suspended during the COVID19 outbreak and never resumed.
- Strategic stability talks began in 2021 following the Geneva meeting between Presidents Joe Biden and Vladimir Putin, but collapsed with the Ukraine war.
- Last year, Russia DE ratified the CTBT to bring it on a par with the U.S.,

raising concerns about the resumption of nuclear testing.

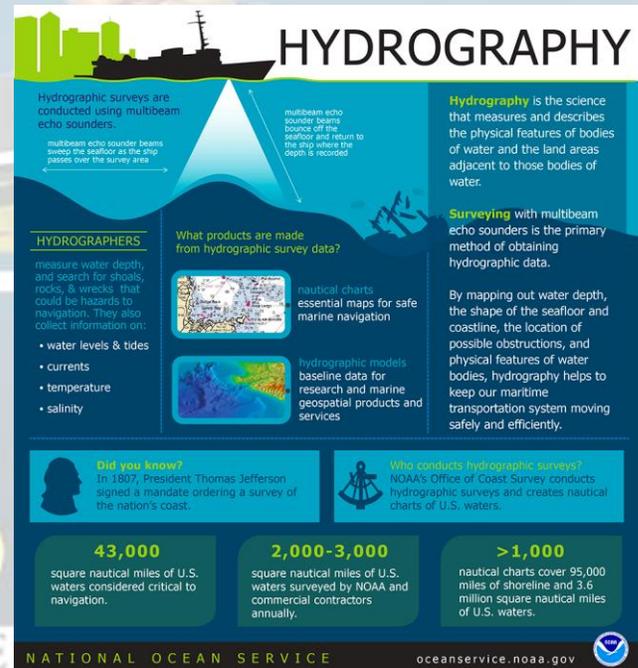
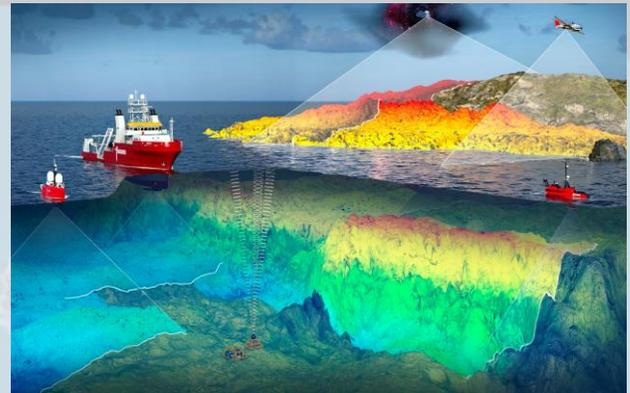
- During the Cold War, the U.S.'s nuclear umbrella tied its European allies closer.
- Today, domestic compulsions are turning the U.S. inwards, raising questions in the minds of its allies about its 'extended deterrence' guarantees, especially in East Asia.
- Japan, South Korea, and Taiwan have the technical capabilities to develop an independent nuclear deterrent within a short time, given political will.
- It is only a matter of time before U.S. pragmatism reaches the inevitable conclusion that more independent nuclear deterrent capabilities may be the best way to handle the rivalry with China.

The Hindu

Hydrography - India and Maldives

- The recent decision by the Maldives to revoke an agreement with India for joint hydrographic surveys in Maldivian waters has caused considerable dismay in Indian media and strategic circles.
- The move by Male, in mid-December 2023, came a few weeks after the archipelagic state formally asked

New Delhi to withdraw its Indian military presence from its shores.



- Since the election of Mohamed Muizzu as Maldivian President in November 2023, there has been a deliberate, if predictable, attempt by Male to create a distance with New Delhi.
- The Maldives would like the world to believe that terminating the

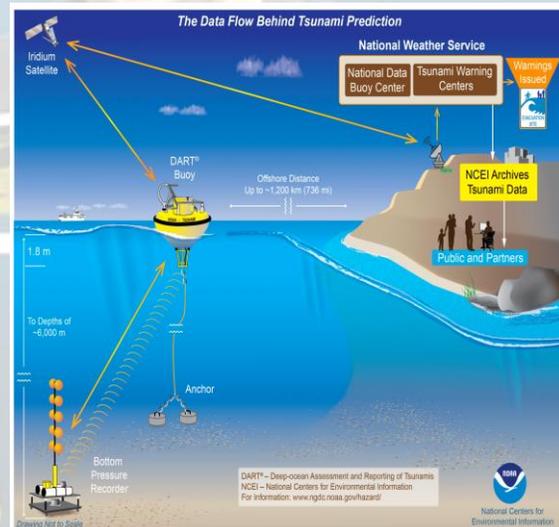
hydrography pact is a way of asserting its autonomy and agency.

- It is not. Far from balancing ties with India, Male has thrown in its political lot with China.
- It is worth noting that hydrographic data inherently has a dual nature in that the information collected from the seas can be used for civilian and military purposes.
- Marine scientists maintain that the data that helps advance nonmilitary objectives, such as ensuring navigational safety, marine scientific research, and environmental monitoring, can also be used to facilitate military aims such as surveillance of a nation's vital coastal installations and warfighting assets.
- Even so, China is unique in using its marine and seabed surveys to advance a largely strategic agenda
- Indian observers point out that China's ocean surveys play an important part in enhancing China's antisubmarine warfare capabilities.
- The United Nations Convention on the Law of the Sea (UNCLOS) does not explicitly authorised a coastal state to regulate hydrographic surveys or military surveys conducted beyond its territorial sea; a littoral state may only regulate marine scientific

research in its exclusive economic zone (EEZs).

- By implication, foreign maritime agencies conducting hydrographic surveys are free to map the seas outside a coastal state's territorial waters. It is this prospect that Male finds problematic.
- The Hindu

Tsunami and NDMA Guidelines



- After the 2004 Indian Ocean Tsunami, India has now developed a state-of-the-art Tsunami Early Warning System in the country.
- The critical gaps that now remain are the lack of public awareness on tsunami risk and vulnerability in the coastal areas, the weak enforcement and compliance of town planning byelaws, development control regulations and building codes in the

coastal areas, and the challenges in implementation of appropriate technologies to disseminate and communicate the early warning to the coastal inhabitants located in the near vicinity of a near source tsunami.

- **Tsunami Hazard Assessment**
- **Tsunami Vulnerability Assessment**
- **Geographic Information Systems (GIS)**
- **Role of the Indian Naval Hydrographic Department (INHD):** INHD shall regularly provide bathymetry information to authorized agencies for drawing the inundation maps
- **Use of Satellite Imageries in Monitoring:**
- **Guidelines**
- **Preparedness**
- **Warning System Components and Instruments**
- **Decision Support System and Standard Operating Procedures**
- **Tsunami Bulletins and Warning Categorization**
- **Tsunami Early Warning Dissemination**
- **Coordination Mechanisms**
- **Research and Development Efforts**

- There is need to develop high-resolution models for tsunami wave propagation in the Indian Ocean.

- **Public Awareness**

- **Medical Preparedness**

Structural Mitigation Measures

Need for New Standards for Protection of Structures against Tsunami

- **Bureau of Indian Standards (BIS) will develop other necessary standards for the safety of natural habitats against tsunami and storm surge.**
- **BIS will also periodically review the standards and codes prepared by them and wherever necessary.**

- **Shelters for Storm Surges and Tsunamis**

Tsunami Mitigation Measures

- **Construction of large scale submerged sand barriers in water depths of about 6 to 8 meters.**
- **Developing sand dunes along the coast with sea weeds or shrubs or casuarinas trees for stabilization of the sand dunes.**

Regulation and Enforcement of Techno-Legal Regime

Land Use

- Coastal land use should be so designed so as to incur minimal losses to life and property due to these events.

Bio-Shields

- **Mangrove forests** constitute provided biological mechanisms for protecting coastal communities from the fury of cyclones, coastal storms, tidal waves and tsunamis., which also safeguards ecological and livelihood security of fishing and farming communities living in the coastal zone



Monitoring Shelterbelt Plantations and Mangrove Regeneration Zones

Emergency Tsunami Response

Tsunami Response Requirement

- A coordinated and effective response system would be required for management of tsunami at central, state, district and community levels

Community-Based Disaster Response

- A number of organisations, like NGOs, Self Help groups, Community Based Organisations, youth organizations, women's groups, volunteer agencies, civil defence, home guards, etc. normally volunteer their services in the aftermath of any disaster.
- **Free movement zone**



- The 1,643-km-long India-Myanmar border, which passes through Mizoram, Manipur, Nagaland and Arunachal Pradesh, currently has FMR. It was implemented in 2018 as part of India's Act East policy.
- The Free Movement Regime (FMR), which allows people residing close to the India-Myanmar border to venture 16 km into each other's territory without visa, will be ended soon

Current Affairs 3rd January 2024 by Saurabh Pandey

- The Free Movement Regime is a pact between India and Myanmar that allows tribes living along the border on either side to travel up to 16 km inside the other country without a visa.
- FMR is being seen as a part of the India's Act East policy.

Rationale behind FMR

- The boundary between India & Myanmar was demarcated by the British in 1826.
- This effectively divided people of the same ethnicity and culture into two nations without seeking their opinion.
- Hence, need was felt to enable ethnically similar communities living across the borders to move freely without the need of a visa.
- The FMR was supposed to provide impetus to local trade and business.
- However, it has been criticized for unintentionally aiding illegal immigration, drug trafficking, and gun-running

WHY FMR TO END?

- The idea is to not only to stop the misuse of FMR, which is used by insurgent groups to carry out attacks on the Indian side and flee towards

Myanmar, but also put a halt to influx of illegal immigrants, and paralyse drugs and gold smuggling networks.

- Tendering for an advanced smart fencing system for 300 km of the India-Myanmar border is already in pipeline and the work will be started very soon
- Manipur shares around 390 km of porous border with Myanmar and only about 10 km has been fenced so far.
- Besides, Mizoram has seen an influx of anti-Junta rebels in thousands since the military coup in Myanmar on February 1, 2021
- Mizoram shares a 510-km-long porous border with Myanmar
- Arunachal Pradesh shares a 520-km border with Myanmar while Nagaland shares a 215-km border with the country.

The Hindu