

SAGAR SAMPARK

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Why in News?

The **Ministry of Ports, Shipping, and Waterways of India** has inaugurated 'SAGAR SAMPARK', that marks a significant step towards **digital transformation in the** <u>maritime industry.</u>

What is SAGAR SAMPARK?

About:

- It is an indigenous Differential Global Navigation Satellite System (DGNSS).
 - DGNSS is a **terrestrial based enhancement system** which corrects the errors and inaccuracies in the Global Navigation Satellite System (GNSS) allowing for more accurate positioning information.
- The introduction of the DGNSS system will have a profound impact on maritime navigation, enabling safer and more efficient movement of vessels in port and harbor areas.

Features:

- **Enhanced Safety:** The DGNSS service will assist mariners in safe navigation, reducing the risk of collisions, groundings, and accidents at sea.
- Accuracy Improvement: The DGNSS significantly improves the accuracy of GPS
 positioning, reducing errors caused by atmospheric inferences, satellite clock drift and
 other factors.
- Redundancy and Availability: The DGNSS incorporates multiple satellite constellations like <u>GPS</u> and Global Navigation Satellite System (GLONASS), ensuring increased availability and redundancy as per international standards.
- Precise Positioning: Mariners can now improve their positioning within 5 meters using the latest DGNSS system, enabling better navigation and reducing the margin of error.
- Meeting International Obligations: The DGNSS fulfills the international obligations of the <u>International Maritime Organization (IMO)</u>, Safety of Life at Sea (SOLAS), and the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA).

Note:

- Safety of Life at Sea: The International Convention for the Safety of Life at Sea (SOLAS), is an important international treaty concerning the safety of merchant ships.
 - It ensures that ships comply with minimum safety standards in construction, equipment and operation of ships.
- International Association of Marine Aids to Navigation and Lighthouse Authorities: IALA is a non-profit, international technical association.
 - Established in 1957, IALA encourages its members to work together in a common effort to harmonise Marine Aids to Navigation worldwide and to ensure that the movements of vessels are safe, expeditious and cost-effective while protecting the environment.

What are the Other Government Initiatives Related to Maritime Security?

- NavIC: NavIC or Indian Regional Navigation Satellite System (IRNSS) is designed with a constellation of 7 satellites and a network of ground stations operating 24×7.
 - NavIC coverage area includes India and a region up to 1500 km beyond Indian boundary.
 - IMO has recognized NavIC as a component of the World-Wide Radio Navigation System (WWRNS).
- SAGAR Vision: In 2015, India unveiled it's strategic vision for the Indian Ocean i.e. <u>Security and Growth for All in the Region (SAGAR)</u> to improve relations with its maritime neighbours on the economic and security fronts.
- Indian Ocean Naval Symposium: The <u>IONS</u> is a voluntary and inclusive initiative that brings together navies of Indian Ocean Region (IOR) littoral states to increase maritime co-operation and enhance regional security.
- Maritime India Vision 2030: It aims to accelerate the growth of the maritime sector over the next decade by enhancing infrastructure, efficiency, services and capacity across ports, shipping and waterways.

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