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SATELLITE INTEGRATED MARITIME SAFETY NETWORK for INDIAN FISHING FLEETS



A High - Risk Maritime Border Zone Affecting Fishermen And National Security

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India's Ocean Knowledge Grid: A New Era of Coastal Safety and Security

INDIA'S COASTAL REALITY

- 11,098 km coastline & 2 lakh fishing vessels
Transforming maritime safety in High risk to storms, drift, cross-border arrests
(EXAMPLE SIR CREEK, PALK BAY, ENGLISH CHANNEL, SOUTH CHINA SEA, BERING SEA.)
- Limited real-time monitoring & fragmented coastal data



INDIAN FISHERMAN ARRESTED AFTER CROSSING SIR CREEK BORDER WITHOUT KNOWING DIRECTIONS

THE NEED

- Integrated Hydrospatial Infrastructure
- Unified digital ocean grid combining EO satellites, AI, and maritime security systems
- Essential for Blue Economy Vision 2047



Our Contribution : Satellite - Integrated Maritime Safety Network



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CORE CAPABILITIES

- Global satellite connectivity for boats beyond GSM range
- AI-based drift detection & weather alerts
- Multi-layer geo-fencing for border protection (20 NM, 15 NM, 5 NM) Transforming-Maritime-Safety-In...
- Real-time integration with Coast Guard/Navy
- Universal SOS, anti-tampering, cross-border detention alert

WHY IT MATTERS FOR INDIA

- Reduces illegal detentions of fishermen (Sir Creek, IMBL)
- Enhances Maritime Domain Awareness (MDA)
- Strengthens Blue Economy safety net
- Enables data-driven planning & disaster readiness



Hydrospatial Architecture for National Deployment

MULTI-LAYER COMMUNICATION SYSTEM

Transforming-Maritime-Safety-In...

- AIS (Boat-to-Boat)
- LoRa Mesh (Harbour clusters)
- GSM/LTE (Near-shore)
- Satellite (Deep sea safety backbone)

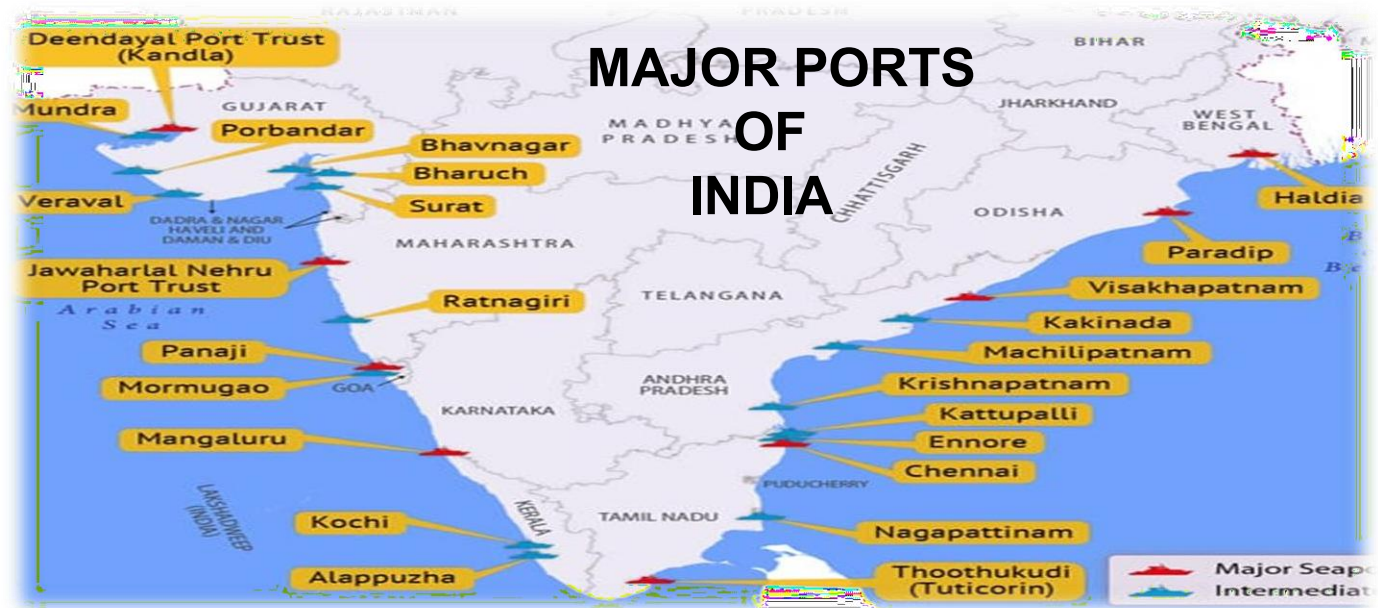


NATIONWIDE DEPLOYMENT STRATEGY

- Phase 1: High-risk zones – Gujarat (Sir Creek), TN, WB
- Phase 2–3: AP, Odisha, Kerala, Karnataka, Maharashtra
- Phase 4: Islands & remaining coastline

OUTCOME

- India's first integrated fisher safety grid
- Unified hydrospatial data layer for policy & security
- Supports Sagarmala, Deep Ocean Mission & (Maritime India Vision MIV 2030)



PROJECT TEAM :



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