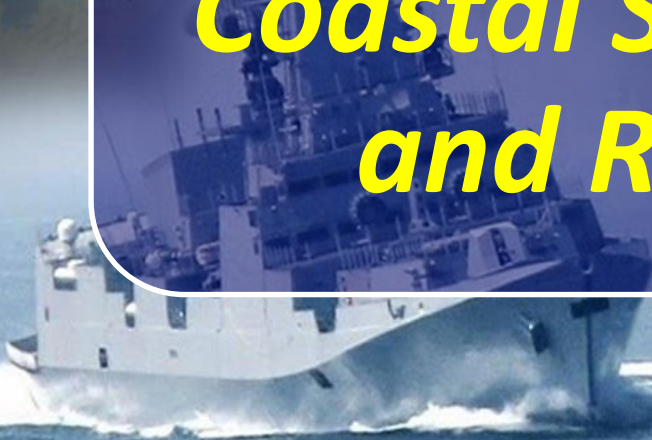




***IN Perspective:
Coastal Surveillance
and Response***





SCOPE

Background

Surveillance Capability

Response Mechanism

Challenges

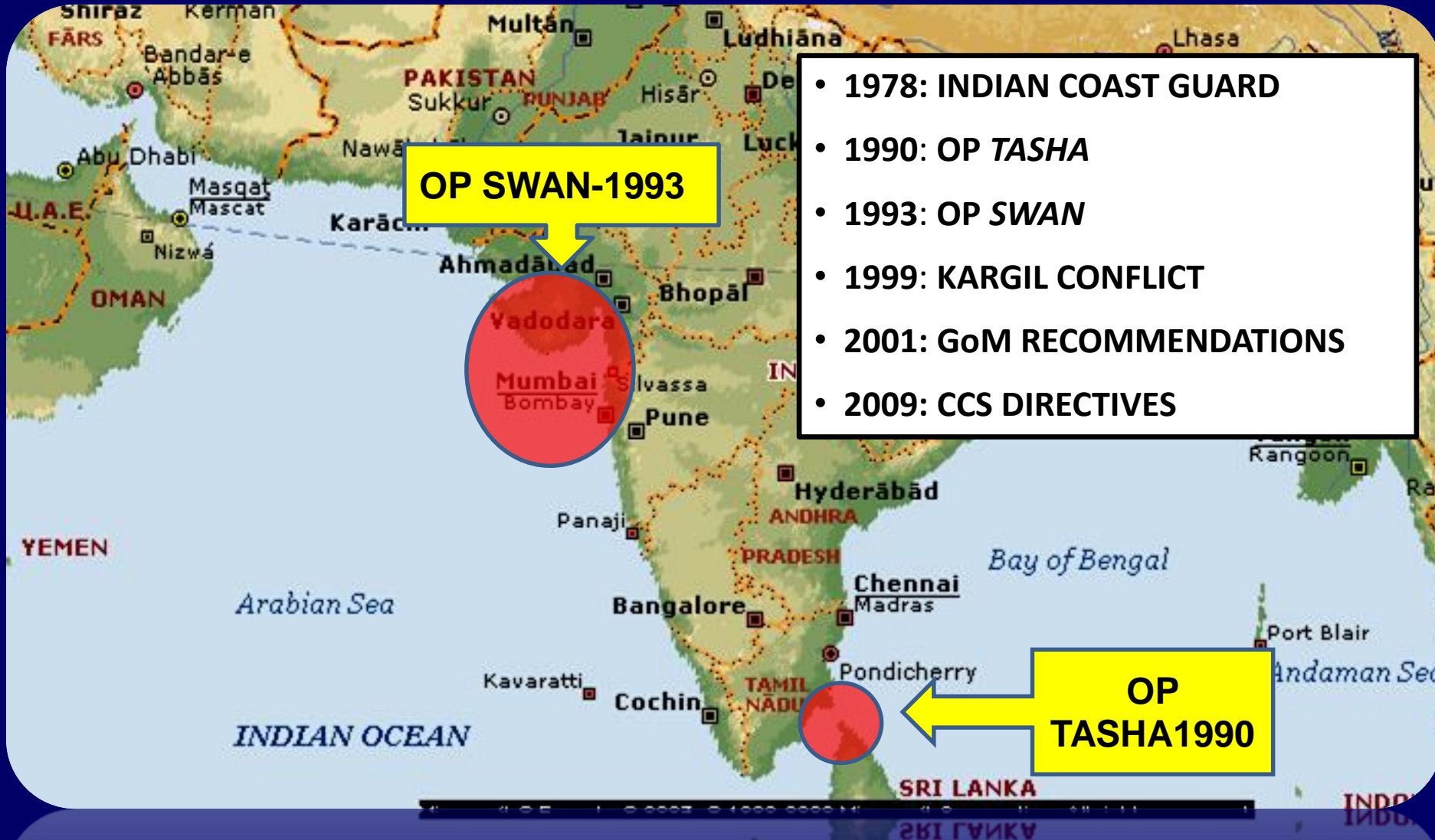


BACKGROUND





BACKGROUND



- 1978: INDIAN COAST GUARD
- 1990: OP TASHA
- 1993: OP SWAN
- 1999: KARGIL CONFLICT
- 2001: GoM RECOMMENDATIONS
- 2009: CCS DIRECTIVES



SURVEILLANCE CAPABILITY



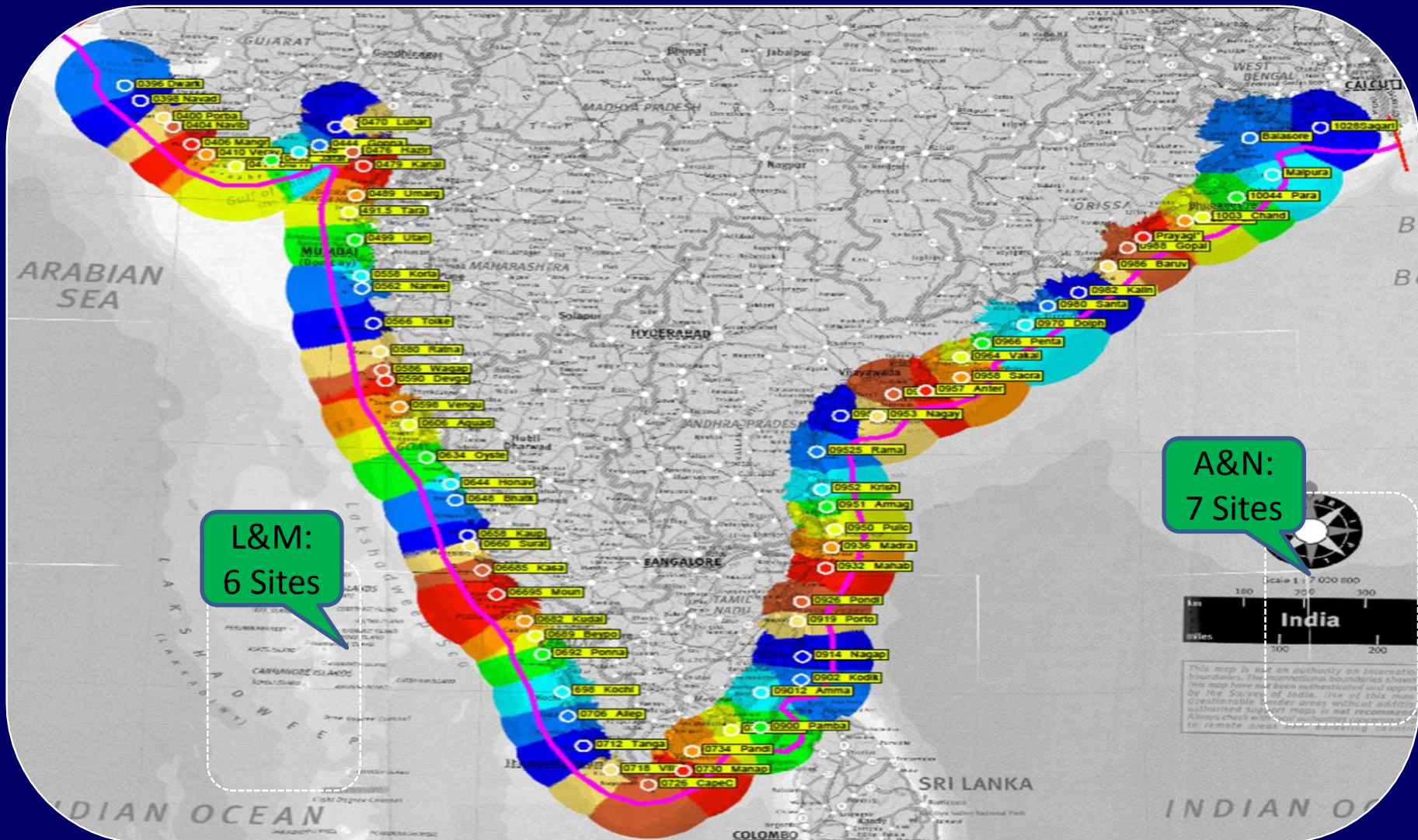


COASTAL RADARS





NATIONAL AIS CHAIN



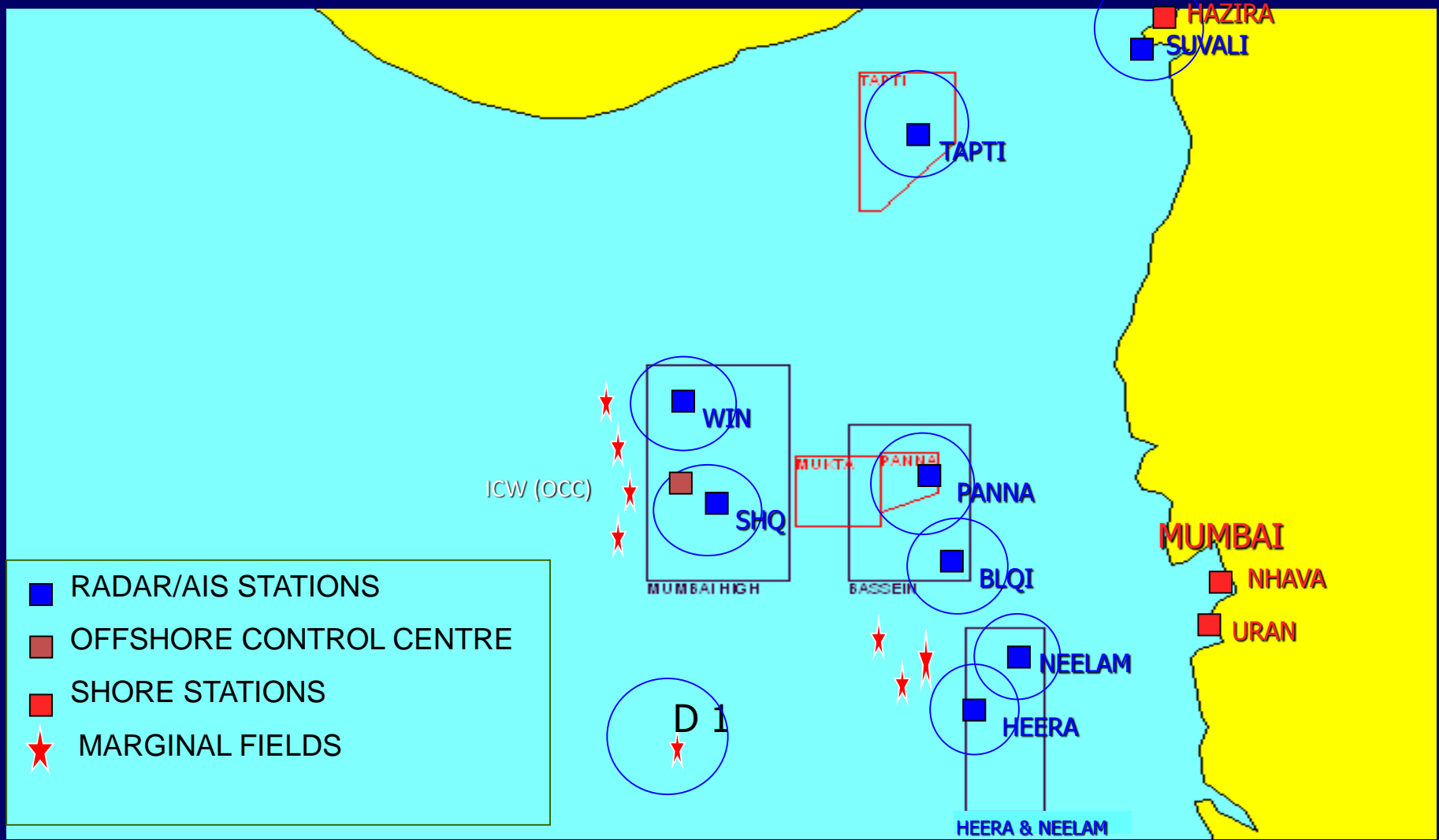
**A&N:
7 Sites**

Scale 1: 7 000 000
180 200 300
100 200
India
miles

This map is not an authority on international boundaries. The international boundaries shown on this map have not been authenticated and approved by the Survey of India. Use of this map is questionable under areas without additional authorized support maps is not recommended. Always check with local authorities responsible to remote areas.

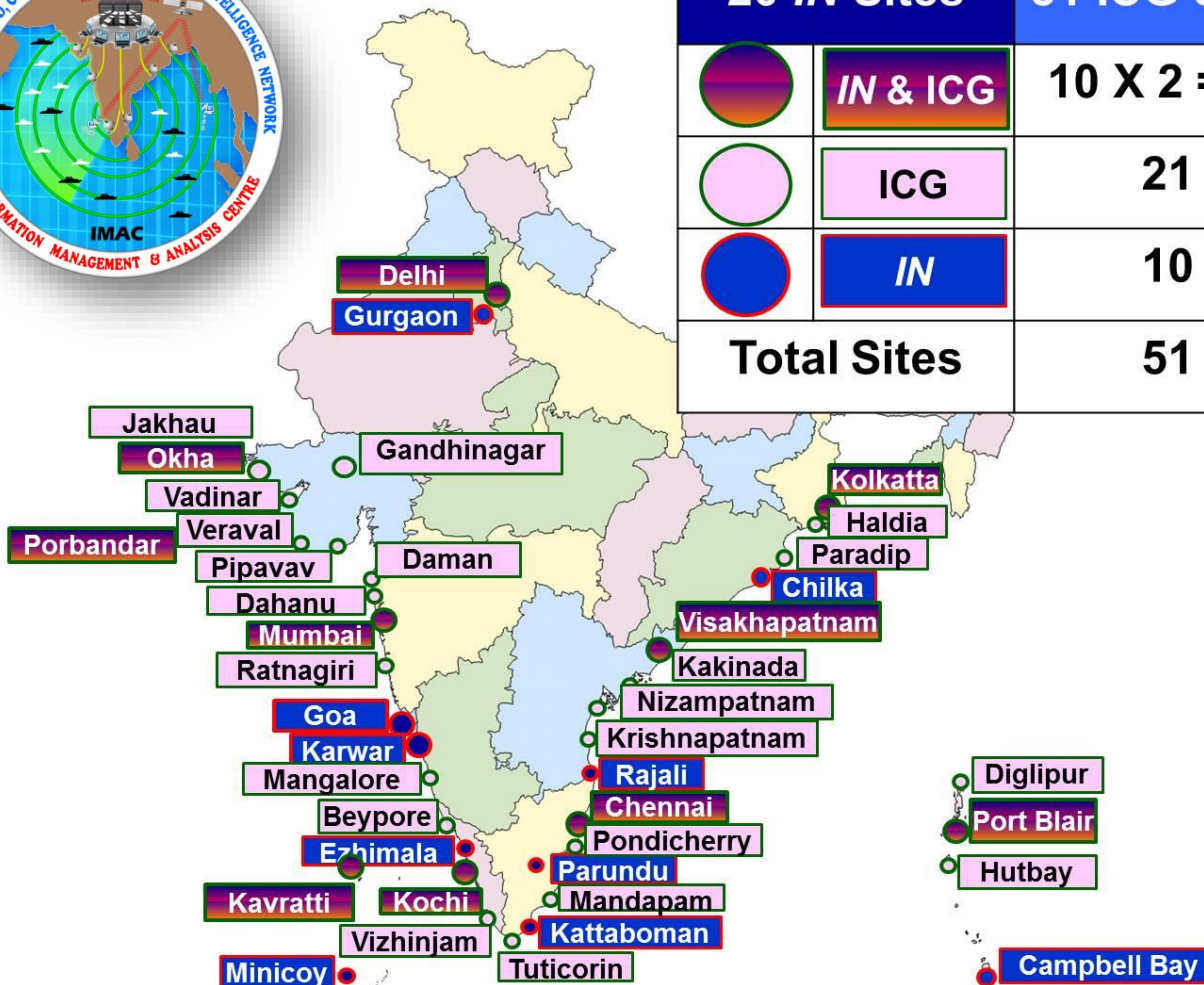


VATMS(W)





NC³I NETWORK



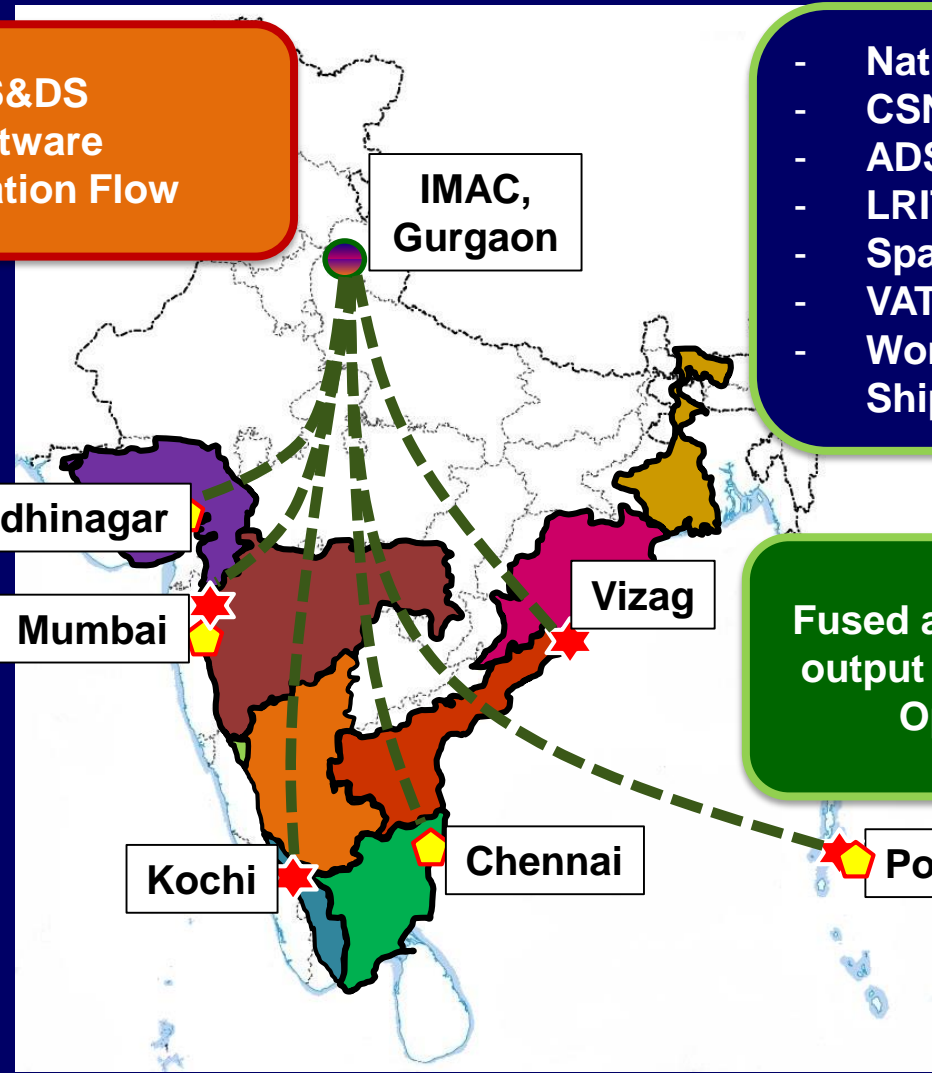
| 20 IN Sites | | 31 ICG Sites |
|--------------------|---------------------|--------------|
| | IN & ICG | 10 X 2 = 20 |
| | ICG | 21 |
| | IN | 10 |
| Total Sites | | 51 |



NC³I NETWORK

CS&DS
Software
Information Flow

- National AIS
- CSN from ICG
- ADS-B
- LRIT
- Space Based AIS
- VATMS
- World Registry of Shipping (WRS)



Fused and correlated
output to IN and ICG
Operators

- IMAC
- ROC
- JOC

A collage of various military assets including a helicopter, jets, a carrier, and various warships. The background is a blue-tinted collage of military assets including a helicopter, jets, a carrier, and various warships. A dark blue horizontal band is overlaid across the center of the image, containing the text 'RESPONSE MECHANISM' in yellow, bold, sans-serif font. The text is underlined with a thin yellow line.

RESPONSE MECHANISM



COASTAL SECURITY EXERCISES





FIC/ ISV



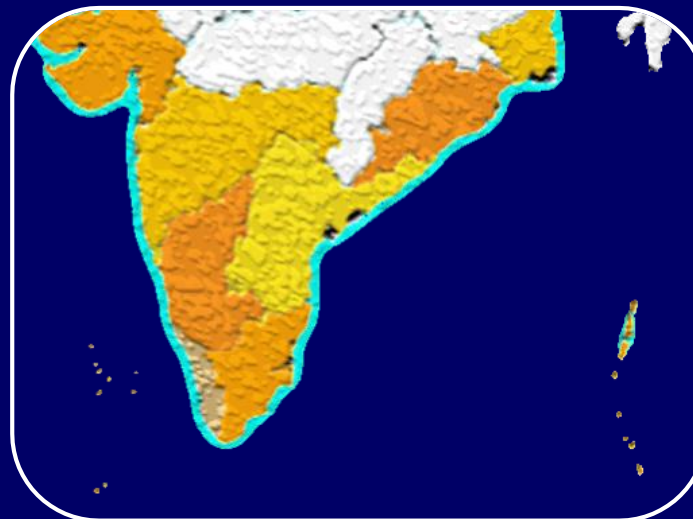


CHALLENGES



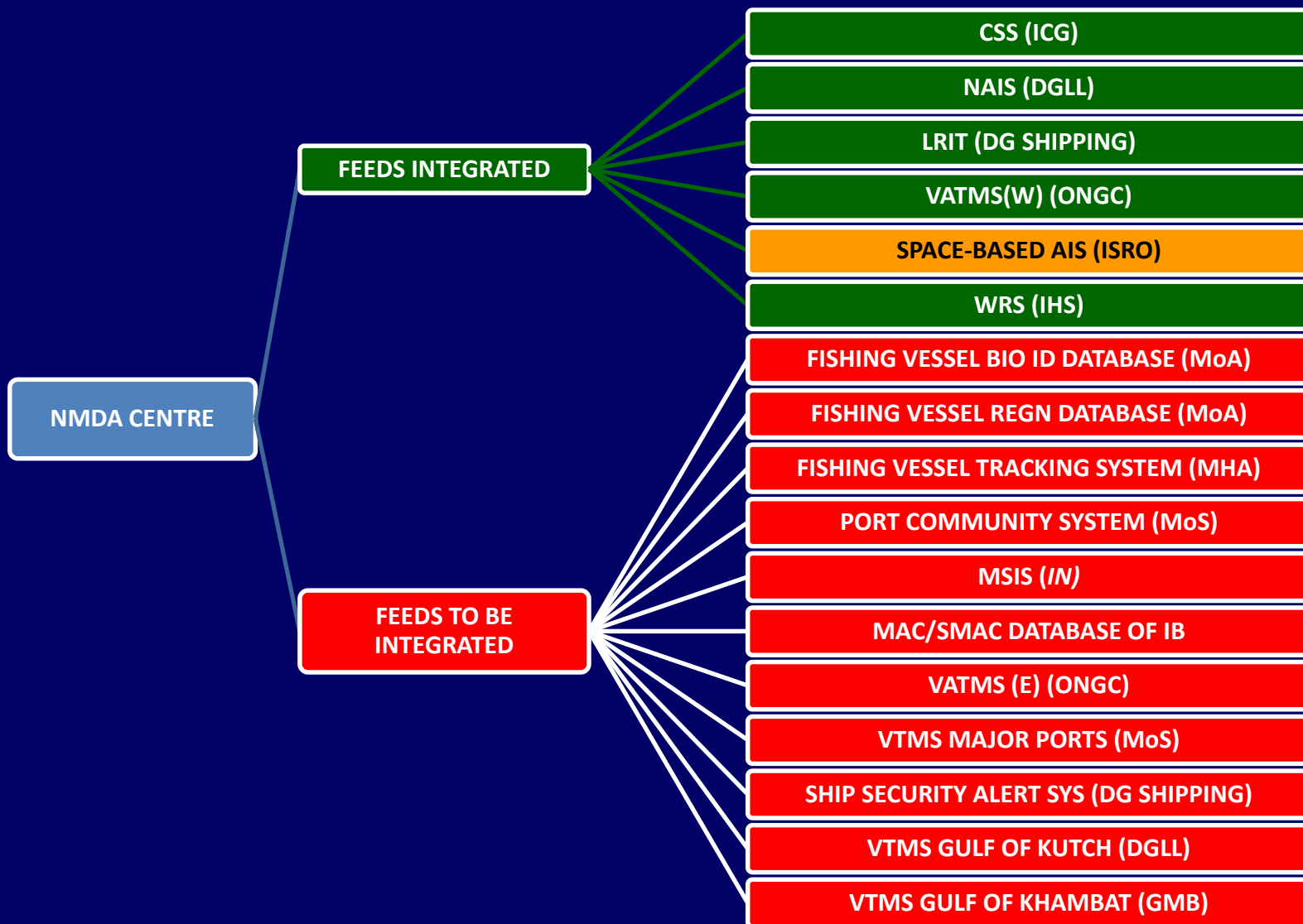
CHALLENGE: SENSOR COVERAGE

- Seamless Coverage
- Greater Depth
- LR Radars
- LR EO/ IR devices





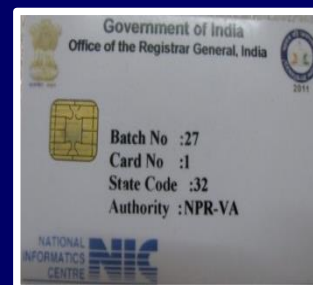
CHALLENGE: NATIONAL MDA





CHALLENGE: FISHERIES MANAGEMENT

- Sub-20m boat tracking
- Monitoring, Control & Surveillance (MCS) Systems





CHALLENGE: MAINTENANCE SUPPORT

- Annual Maintenance Contracts





CHALLENGE: WEAPONS & SENSORS

- EO/ IR Sensors
- Night Vision Devices
- EO-Cued small arms





CHALLENGE: OFFSHORE SECURITY

- Platform Security Systems
- Security Personnel





CHALLENGE: MARITIME GOVERNANCE

- Safety Zones
- Legal Empowerment
- Single-point apex body





CONCLUSION





CONCLUSION

- Significant progress
- Need to address critical gaps
- Vital role of private sector in technological solutions and materiel support
- 'Make in India' solutions



THANK YOU



A collage of military-related images. In the top left, an F-16 fighter jet is shown in flight. Below it, a large grey ship is visible. In the bottom left, a soldier in full combat gear is aiming a rifle. In the bottom right, a group of soldiers is running on a beach towards a landing craft. A large Indian flag is partially visible on the right side. A central blue banner with yellow text reads "DISCUSSIONS".

DISCUSSIONS