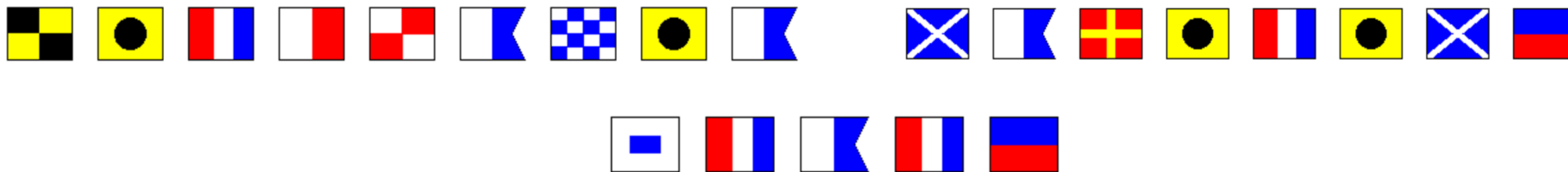




# UNMANNED TECHNOLOGIES IMPLEMENTATION IN LITHUANIAN NAVY FLEET



**LT(N) Vytautas Drejeris**  
Commanding Officer  
LNS "KURŠIS" (M54)



# CONTENT

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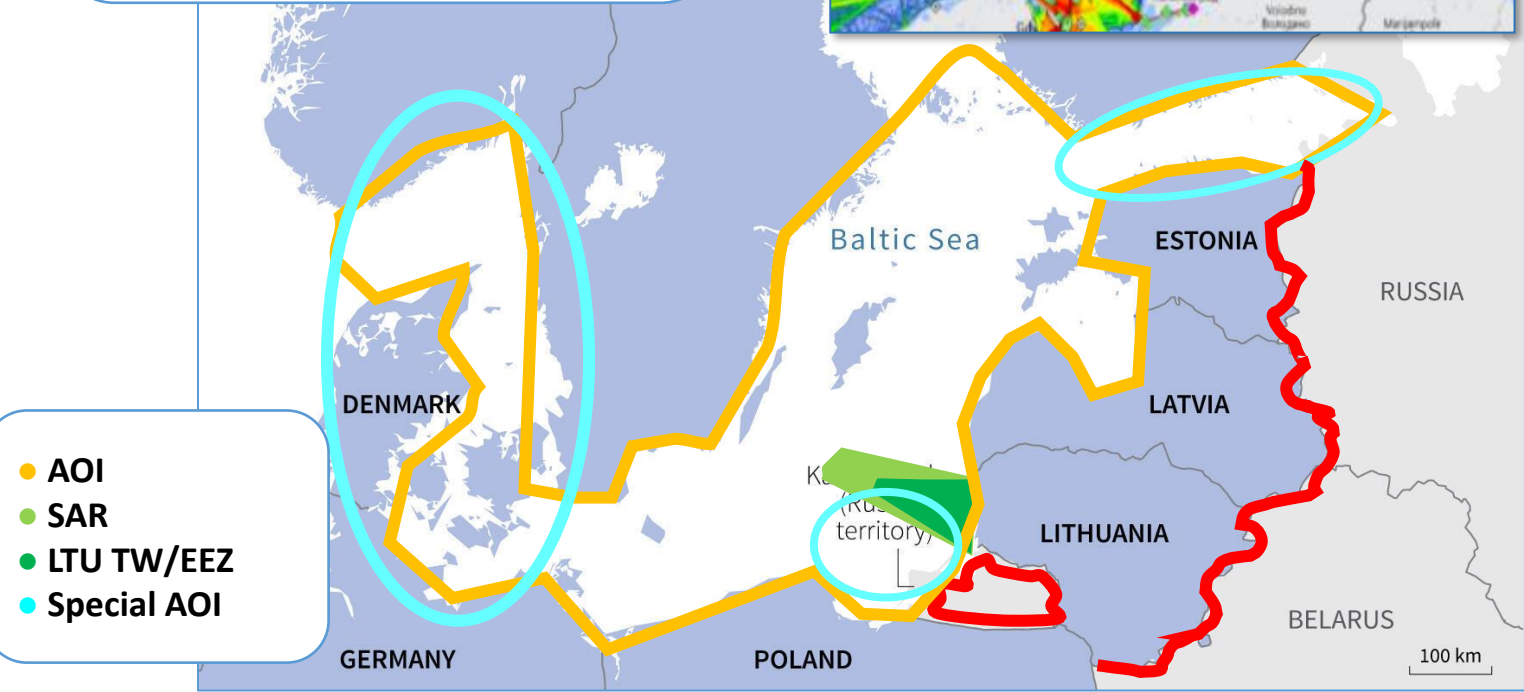
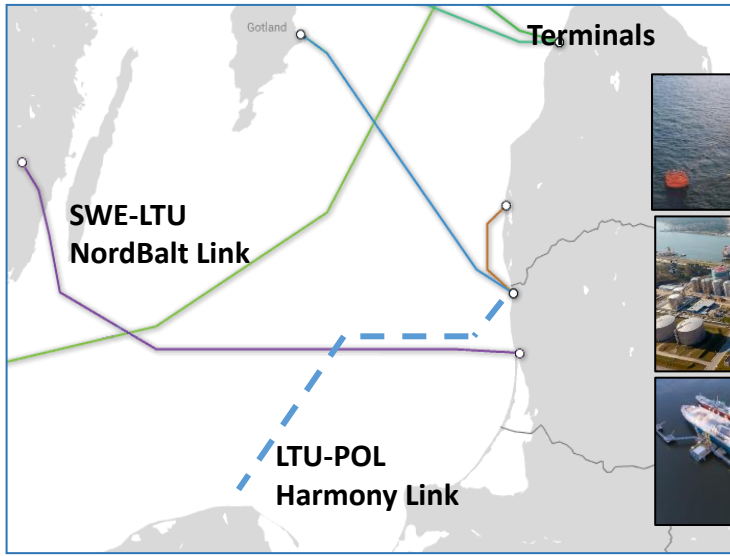
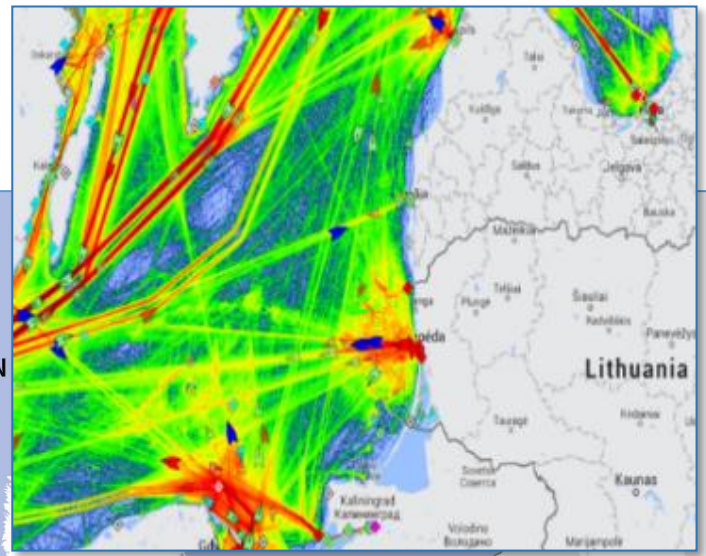
1. Baltic sea operational environment
2. MCMV regeneration: upgrading sensors
3. Improved hull-mounted wideband mine hunting sonar
4. Combining conventional and autonomous MCM systems



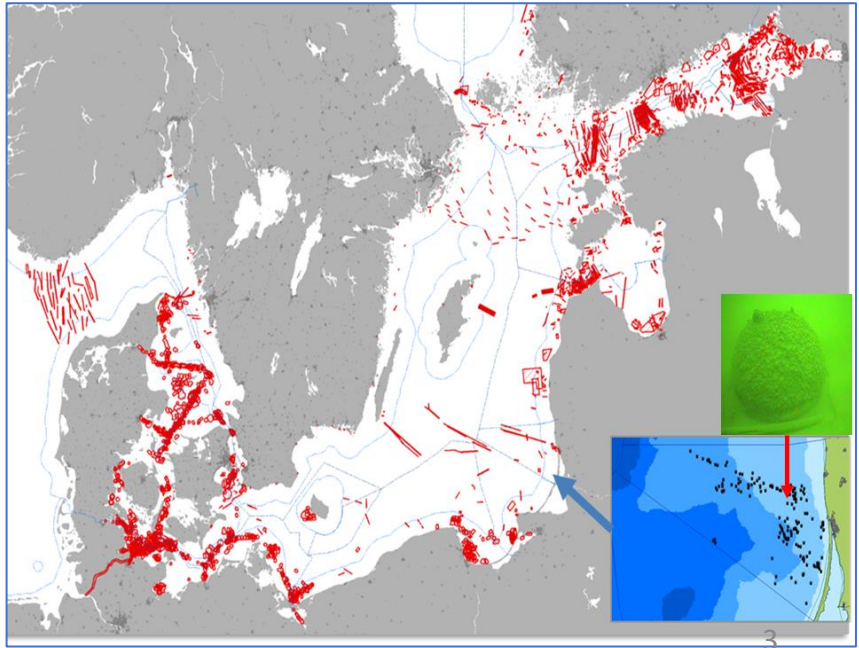
# BALTIC SEA OPERATIONAL ENVIRONMENT



~6,24% LTU GDP  
 ~50% LTU cargo  
 ~58 000 work places  
 100 ships carrying  flag

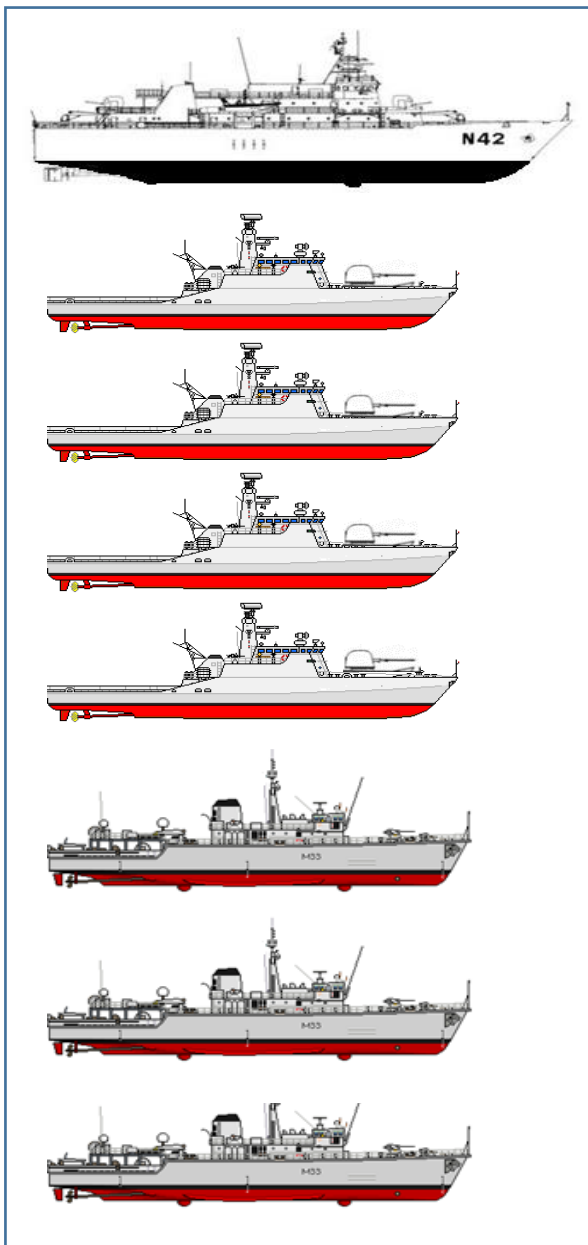


- AOI
- SAR
- LTU TW/EEZ
- Special AOI

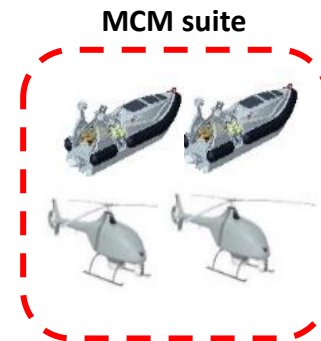
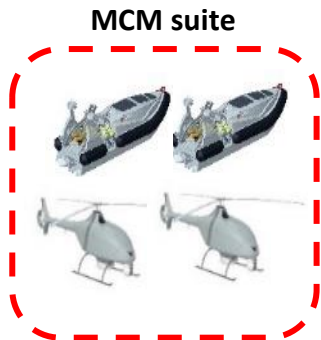




# LITHUANIAN NAVY FLEET DEVELOPMENT CONCEPT

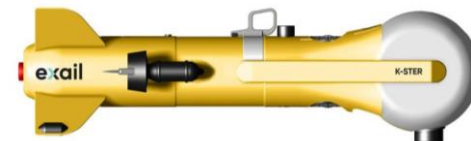
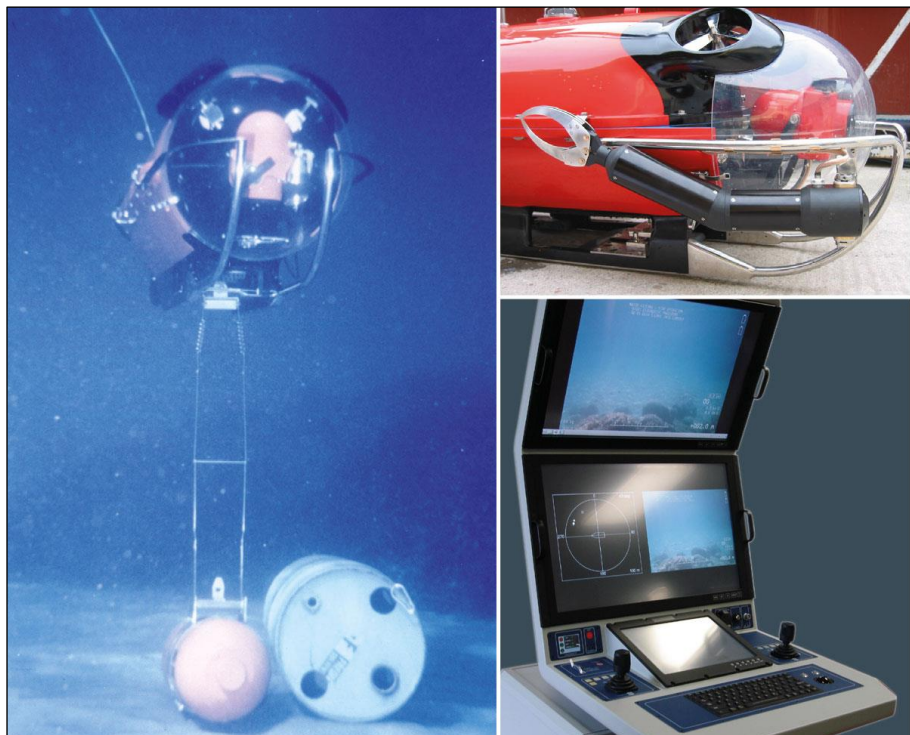


- SIMPLIFIED LOG SUPPORT AND PERSONNEL TRAINING
- OPERATIONAL FLEXIBILITY
- MORE SUBSTANTIAL CONTRIBUTION TO NATO/EU
- ACTIVE ENGAGEMENT WITH INDUSTRY AND R&D





# MCMV regeneration project (Ex HMS Quorn)





# MCMV regeneration project (Ex HMS Quorn)



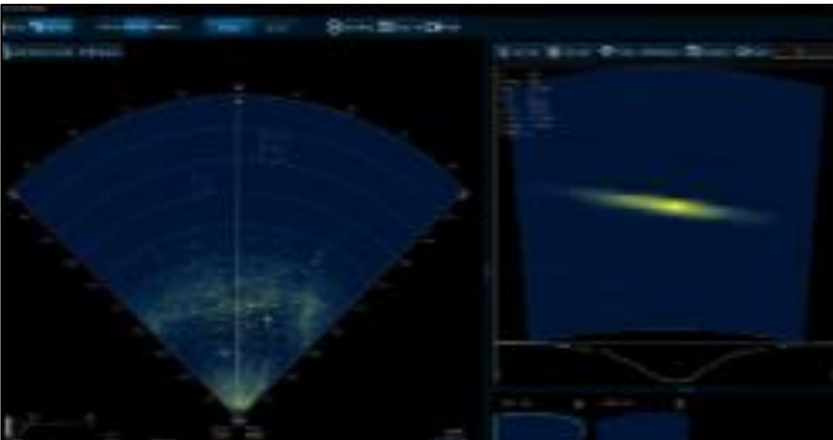
**MSI - DS30M SeaHawk DS30M A1  
(Bushmaster 44S 30 mm gun)**



**IdRobotica PILOTA C2 system**

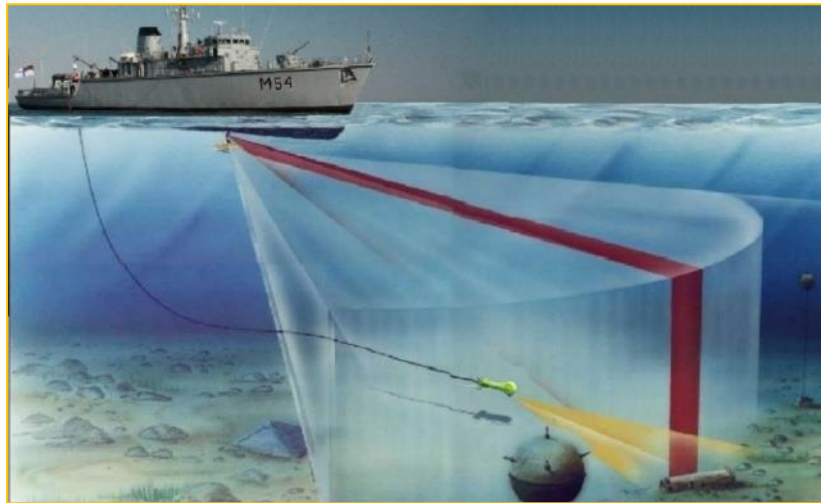
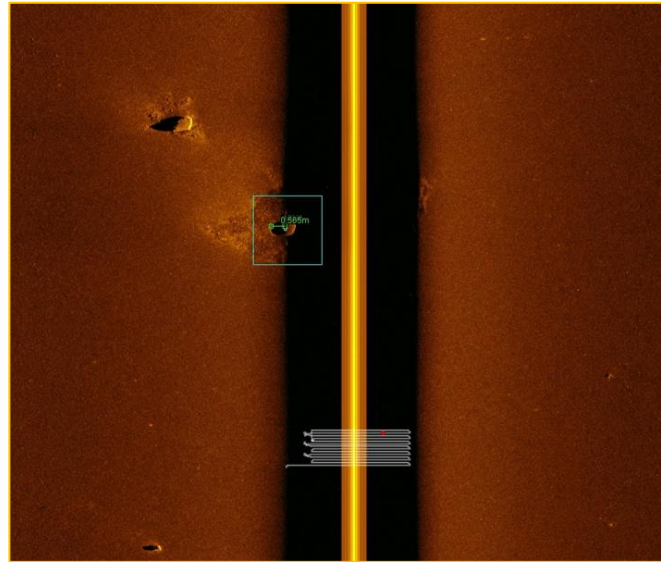
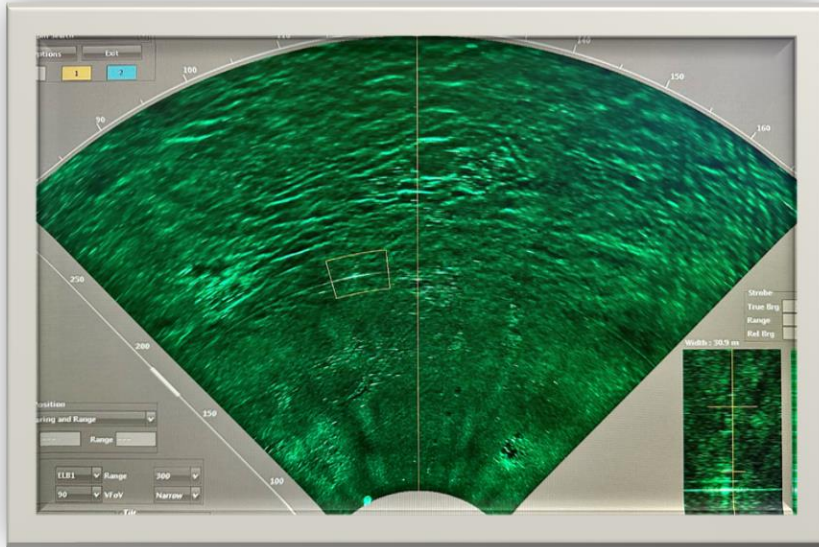


**Teledyne SeaBat 7123-MkII sonar**



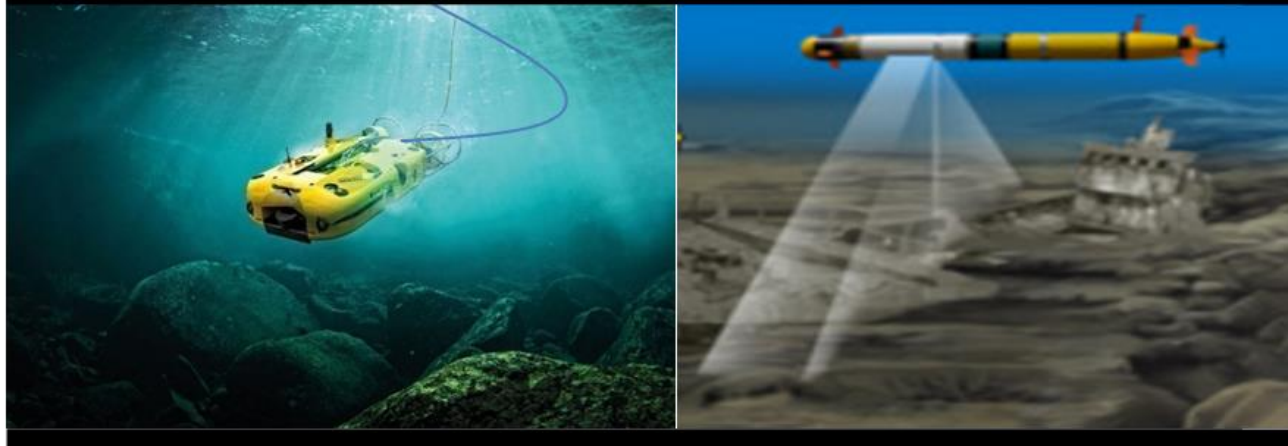
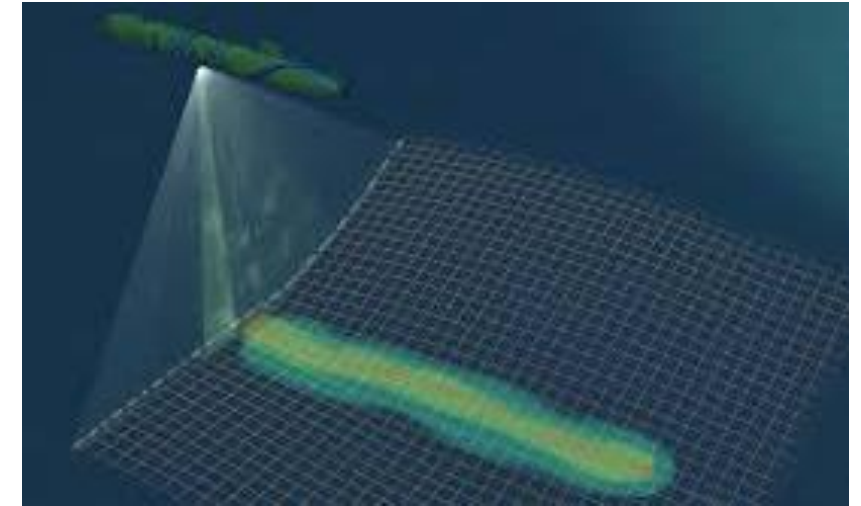


# Combining conventional and autonomous MCM systems





# Combining conventional and autonomous MCM systems



Bottom type A-B

Bottom C  
Thermal layers  
Depths > 80 m  
Bottom D





# KEY CONSIDERATIONS



- **Challenges in Unmanned Technologies:** Rapid growth in unmanned technologies poses challenges like integrating with legacy systems.
- **Synergy with Manned Platforms:** unmanned systems won't fully replace manned ones in the near future, emphasis lies on optimizing synergy between the two.
- **Areas for Collaboration:** Strategic collaboration areas include autonomy, payloads, design, testing, and common doctrinal development for seamless integration.
- **Role of NATO COEs:** Recognizing NATO Centers of Excellence is pivotal for leveraging expertise and advancing capabilities in unmanned technologies.

# Questions

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*To the prosperity of Maritime state!*