

# Combined Naval Event 2024

Subsea Intelligence: Architecting  
the Future Network and Data Fabric



Digital  
Intelligence

# Subsea Intelligence

## Today's Topics

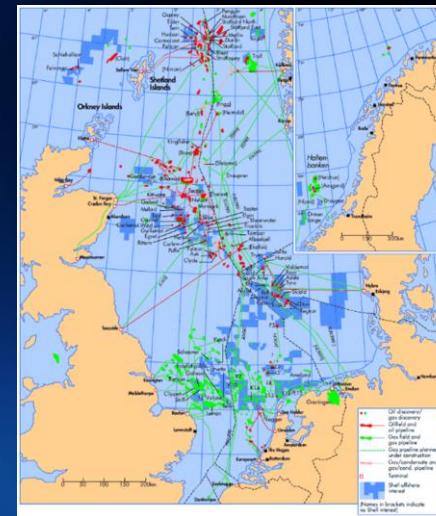
- Introduction
- Context - The Subsea Threat
- BAE Systems Digital Intelligence – Who we are
- DI Labs – An Introduction
- Underwater Networking and Data Architecture – Use Cases
- Underwater Networking and Data Architecture – The Demonstration
- Conclusion



# Context – Why is it Important?

## Exposing the grey-zone...the new cold war

- **Russia submarine fleet** stealth, underwater reconnaissance programme and asymmetric warfare in the underwater domain – poses threat to hold Critical National Infrastructure and NATO security at-risk
- **China underwater operations** exponentially growing, mirroring Russian warfare doctrine – not just focussed in the Indo-Pac region
- **Other near-peer and sub-peer adversaries** increasingly utilising low-cost systems to deliver lethal effect – exploiting availability of expendable autonomous weapon systems



**3 Red Sea data cables cut as Houthis launch more attacks in the vital waterway**



**China's Next Naval Target Is the Internet's Underwater Cables**



中国正在建设一条水下的钢铁长城，持续推动中国在近海和远海方向的装备建设。

\*Cable locations and sites where cables were



# Digital Intelligence

**BAE SYSTEMS**

BAE Systems Digital Intelligence experts work collaboratively across 16 countries to **collect, connect and understand complex data** so that governments, national security agencies, armed forces and commercial businesses can **tackle evolving digital challenges and unlock digital advantage** in the most demanding environments – through space to the frontline.

## Digital Transformation Partner

Helping our customers understand and achieve the digital advantage needed to deliver their missions to society. Delivering critical digital change and capability – creating the digital thread across their data, using our skills in secure digital engineering, cloud-based big data systems and complex asset management



## Intelligence Systems

Delivering unified operational intelligence capabilities for national security, law enforcement and defence missions including comms intelligence, multi-source intelligence and comms compliance



## Cyber

Ensuring safer cyberspace from enterprise to nation-state level, including enabling responsible government cyber missions and enhancing defence Cyber & Electromagnetic Activities (CEMA)



## Asset Management

Delivering an integrated Enterprise Asset Management capability to reduce the cost of ownership and improve availability of complex assets



## Defence C5ISR

Delivering critical deployed and edge defence capabilities across Command & Control, Comms, Computers & Cyber and Intelligence, Security & Reconnaissance including Multi-Domain Integration and increasing levels of integrated autonomy



## Space Systems

Delivering military, civil & commercial Low Earth Orbit capability and data services as a new British space prime





# BAE SYSTEMS

## DI LABS HISTORY



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1936

Land in Great Baddow acquired by Marconi Wireless Telegraph Company

1939

Marconi Research Labs

1946

GEC Marconi Research

1985

GEC Research Limited

1998

Marconi Technology Centre

2000

BAE Systems Advanced Technology Centre

2015

BAE Systems Applied Intelligence Labs

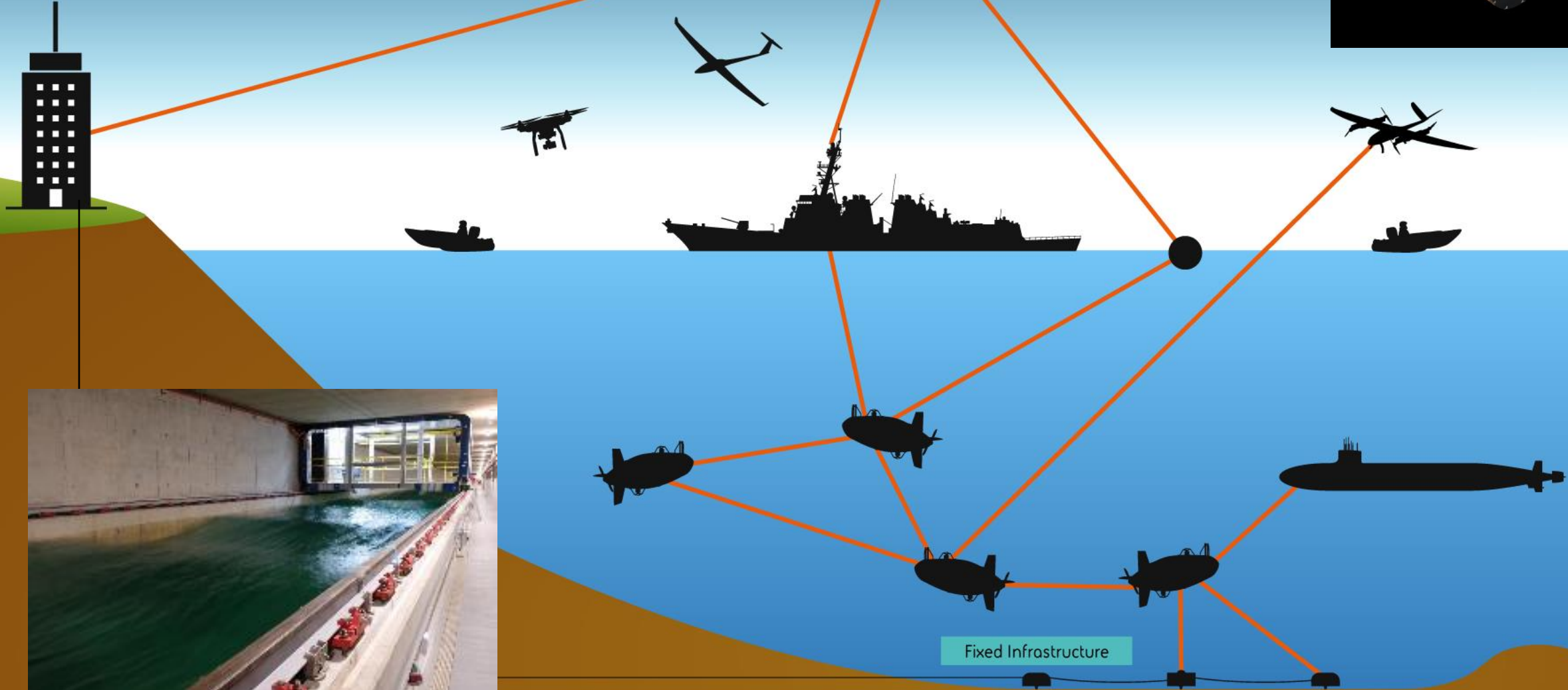
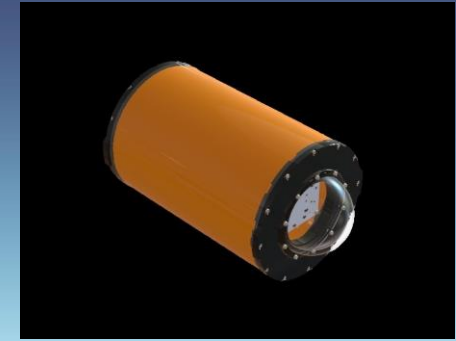
2022

Formation of BAE Systems DI Labs



**BAE SYSTEMS**

# Architecting the Future Subsea Network and Data Fabric

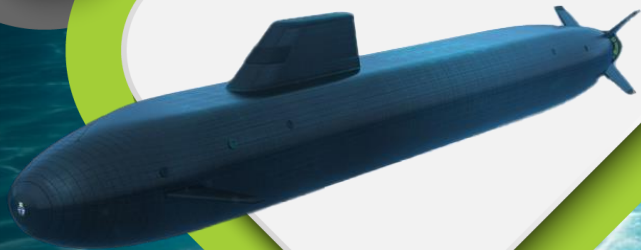


# Recap

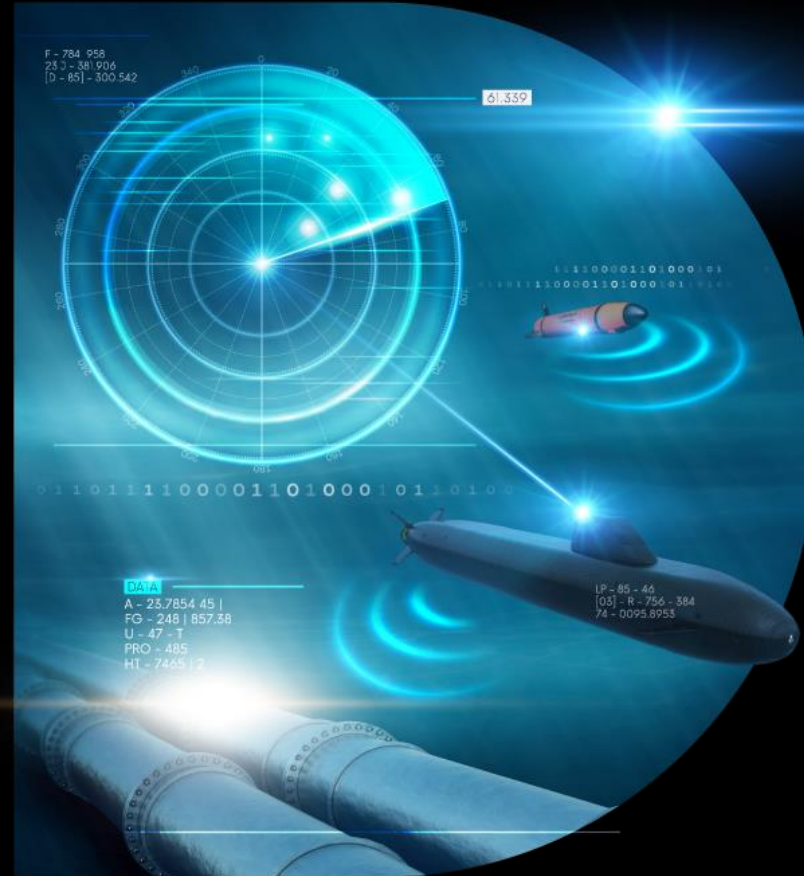
**CONTEXT**

**THREAT**

**THE  
DEMAND  
SIGNAL**



# Questions



Digital  
Intelligence

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