



Royal Netherlands Air Force



NLD Maritime ISR operations



Royal Netherlands Air Force
program management, NH90
LtCDR JR van Doorn

28 October 2024

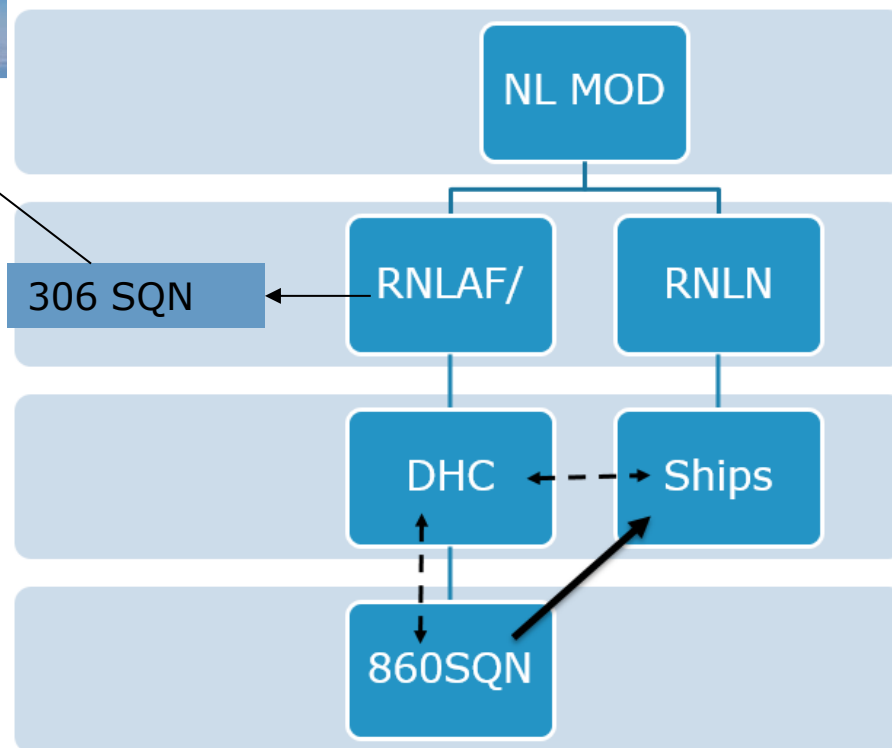


Contents

- The construct
- Areas of operations
- NLD Toolbox for maritime ISR
- Developments & challenges
- Food for thought



Maritime ISR toolbox



deployments





Maritime surveillance and tracking

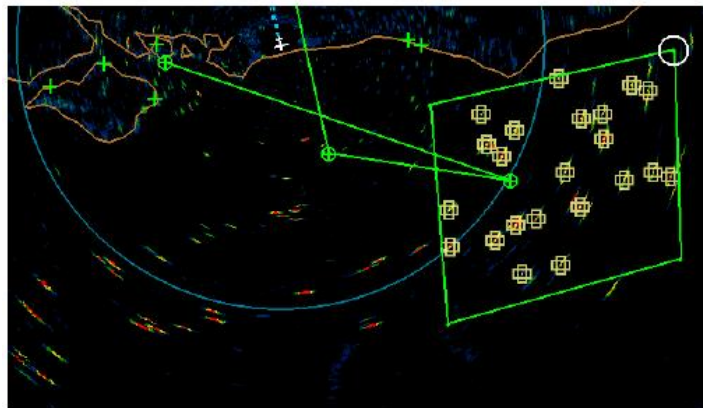
Difficult/small target detection and tracking

Short Range Awareness

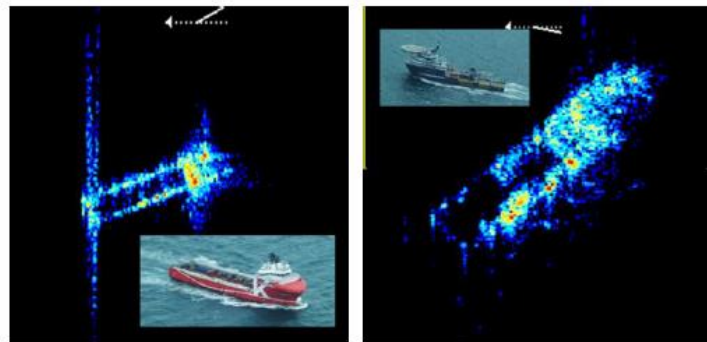
MARITIME



Key Capabilities – Maritime Domain



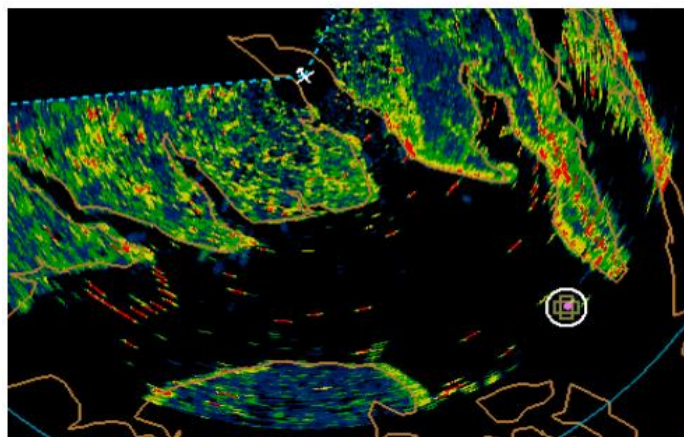
Polygon Based Track Initiation to Declutter Display



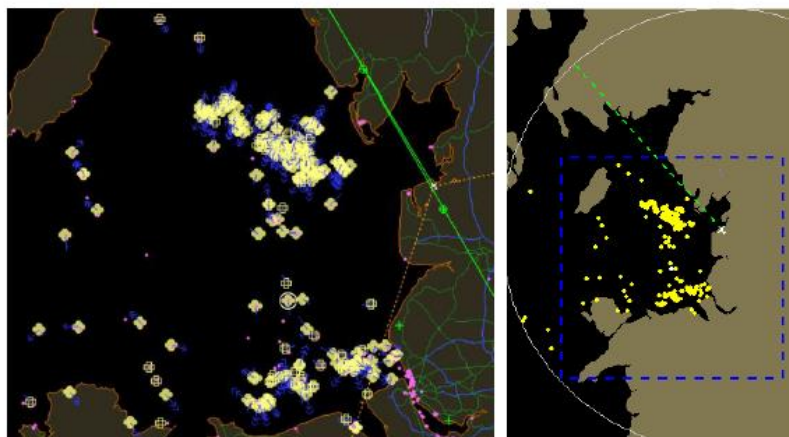
High Resolution ISAR Imaging



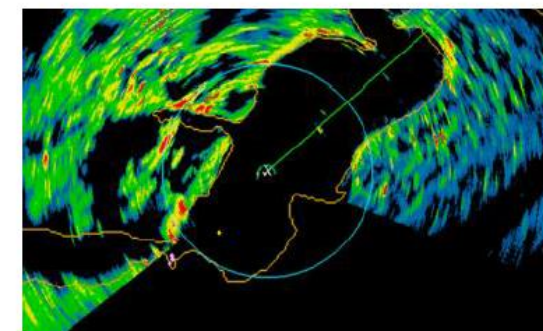
Long Range Maritime Surveillance



High Performance Small Target Detection Mode



Global Automatic Track Initiation with Landmass Rejection



Short Range Coastline Awareness

Introduction NH90



- Composite airframe NFH-TTH
- Full digital fly-by-wire
- Single Pilot Multi Crew Composition (SPMCC)
- Integrated Core & Mission system



The swiss pocketknife

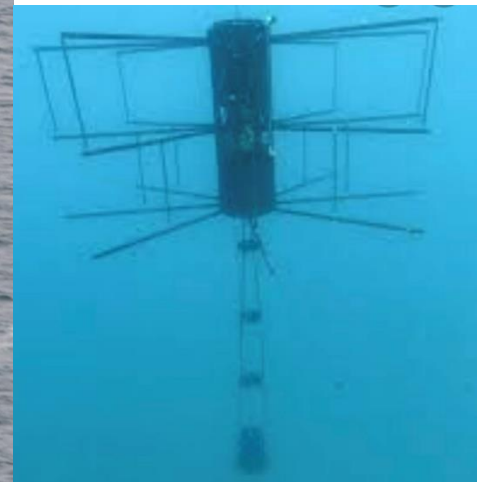
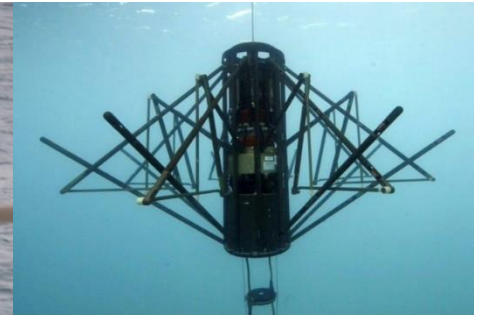
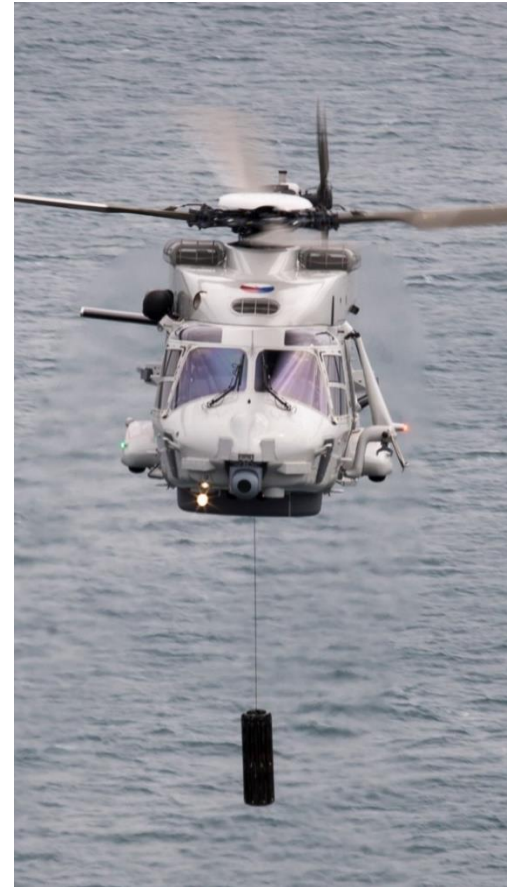


- ASuW
- ASW
- Transport (amphib)
- SAR
- ELINT/EW
- HADR

- MK46 torpedo
- MAG-M3M



- Active Sonar
- Long range radar 360
- AIS
- Sonobuoys
- IFF interrogator M5
- DL11.....
- ESM
- FLIR

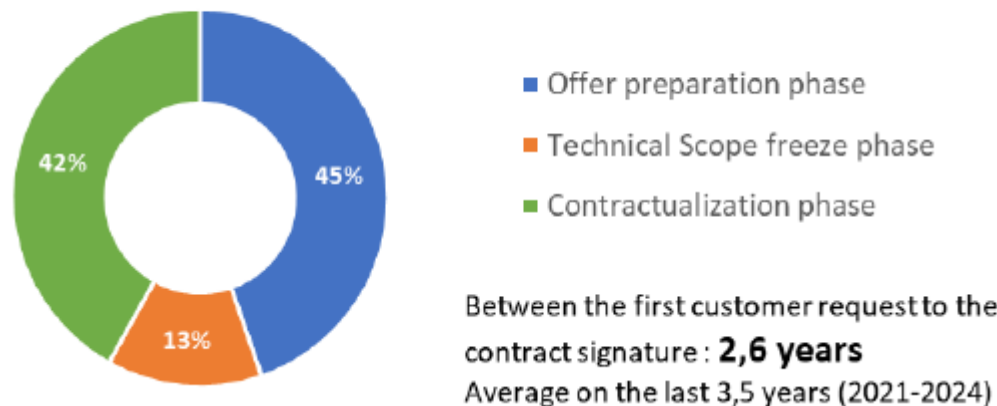


Challenges we are facing

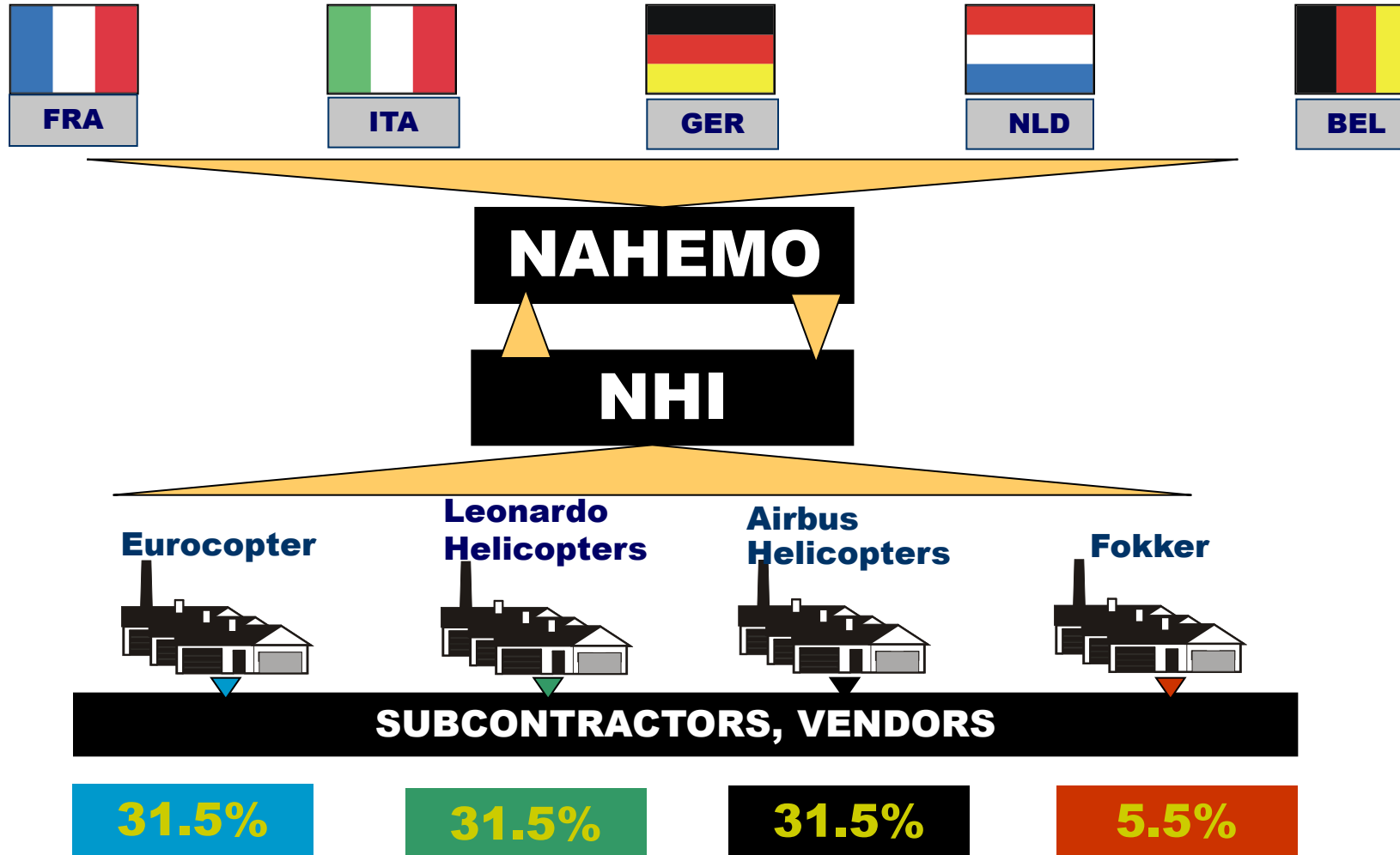


- “co ownership” → Navy centric tasking vs AF led organization;
- Tempo of advancing technology vs risk acceptance in aviation;
- Competing partners in industry.

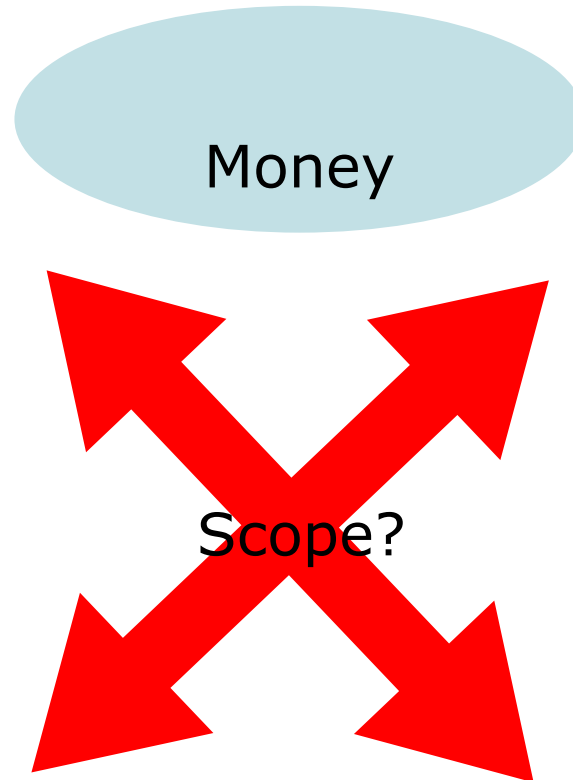
Standalone MPs Lead time between NHI and Customer



Governance external

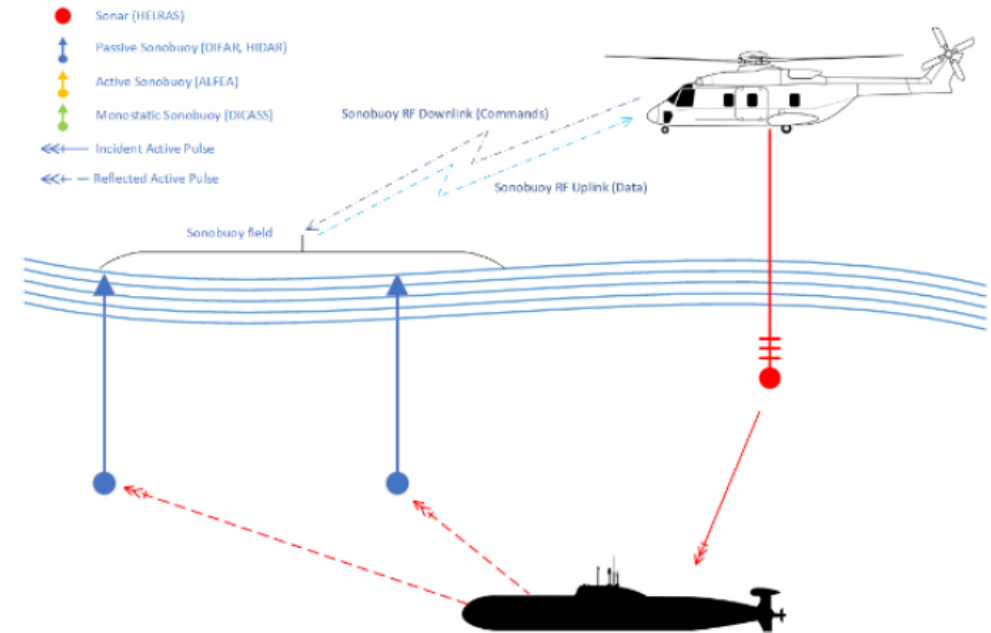


Advanced chess game





1. Software update
2. Datalink 22 incl new radio's
3. New EOS (FLIR)
4. Sonar-upgrade (multistatic)
5. MK54-torpedo integration
6. SATCOM
7. Integrated AIS
8. CRPA
9. EAPS (sandfilters)
10. ESM NG
11. CMA 9000 (IFR)
12. FMFT (simulators)





- Technical personnel;
- Dual tasking;
- Simulator availability;
- Transition from peacetime (support) organisation to “war”-mode;

Budget-constraints lifted, mindset and manning to follow!





- 6,5 can be acceptable.
- Fight through.
- Share expertise (complicated business!)





- How can we decrease time from good idea to operational capability?
- Did we reach a pivot point where improved technology is slowing us down?

