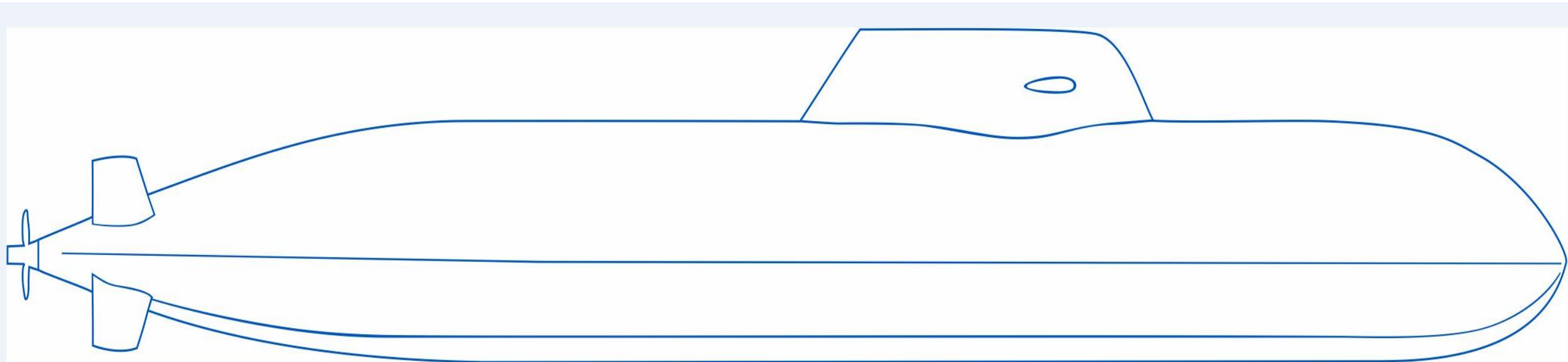
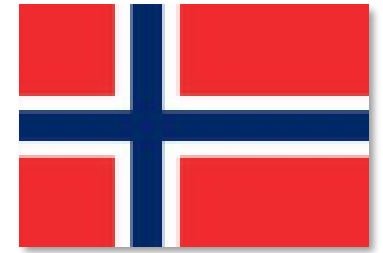




DEU - NOR

Naval Defence Materiel Cooperation New Submarines



Captain (N) Øystein Storebø, Program Director Submarines, Norwegian MOD

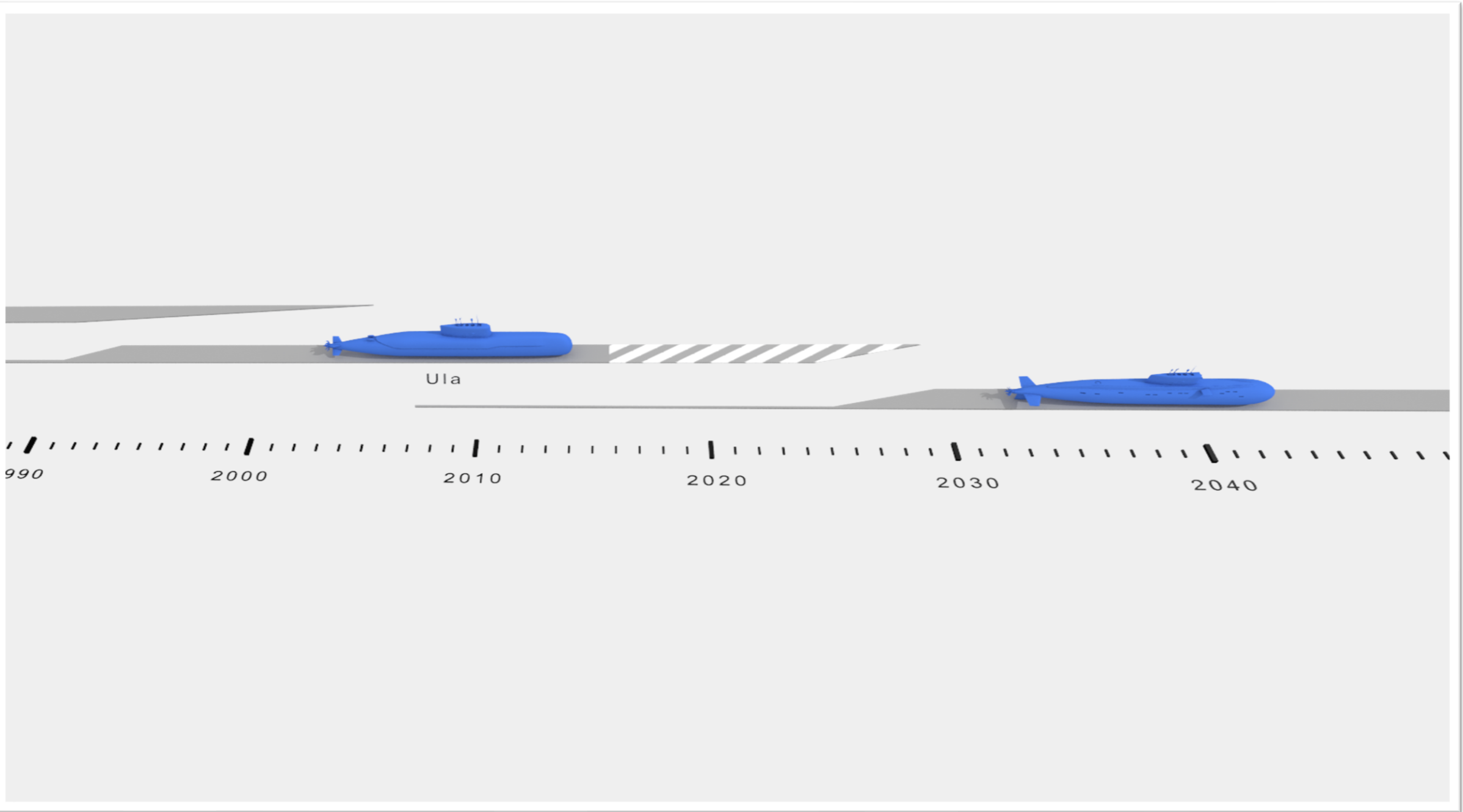
The Norwegian and German common submarine programme and its relevance for other potential partners within NATO

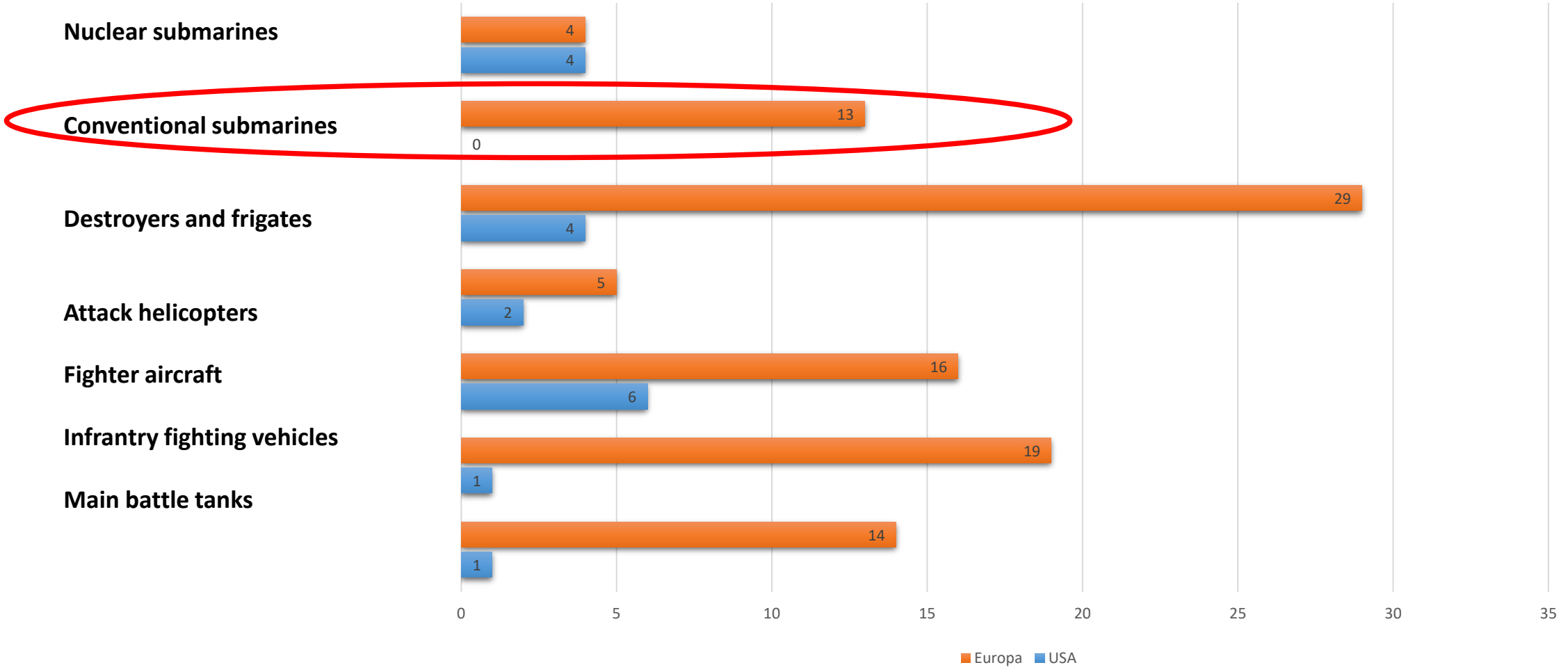
Main points;

1. Enterprise risk
2. Why common design
3. Evolving the cooperation
4. Relevance for other nations











New submarines

Life extension

Annexes and appendixes

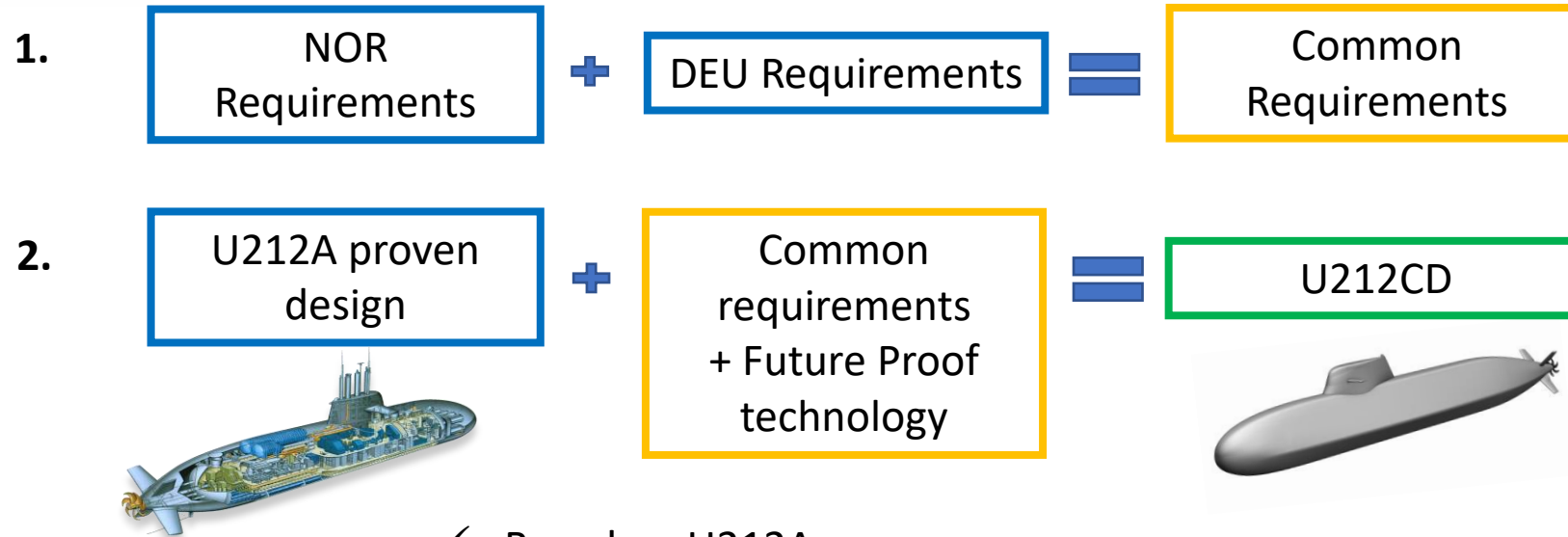
Main document

Cooperation around identical submarines with Germany





Derivation of the U212 Common Design

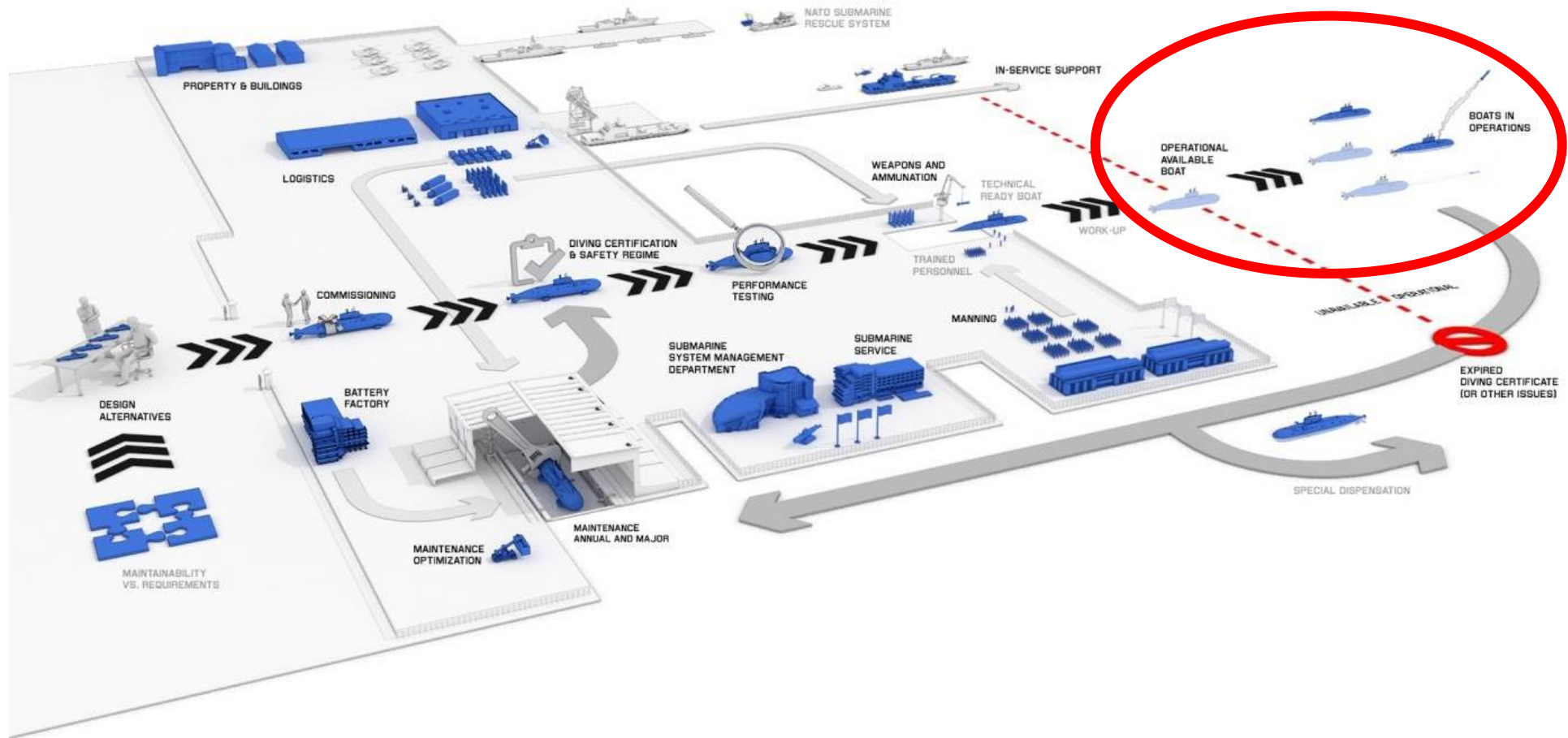


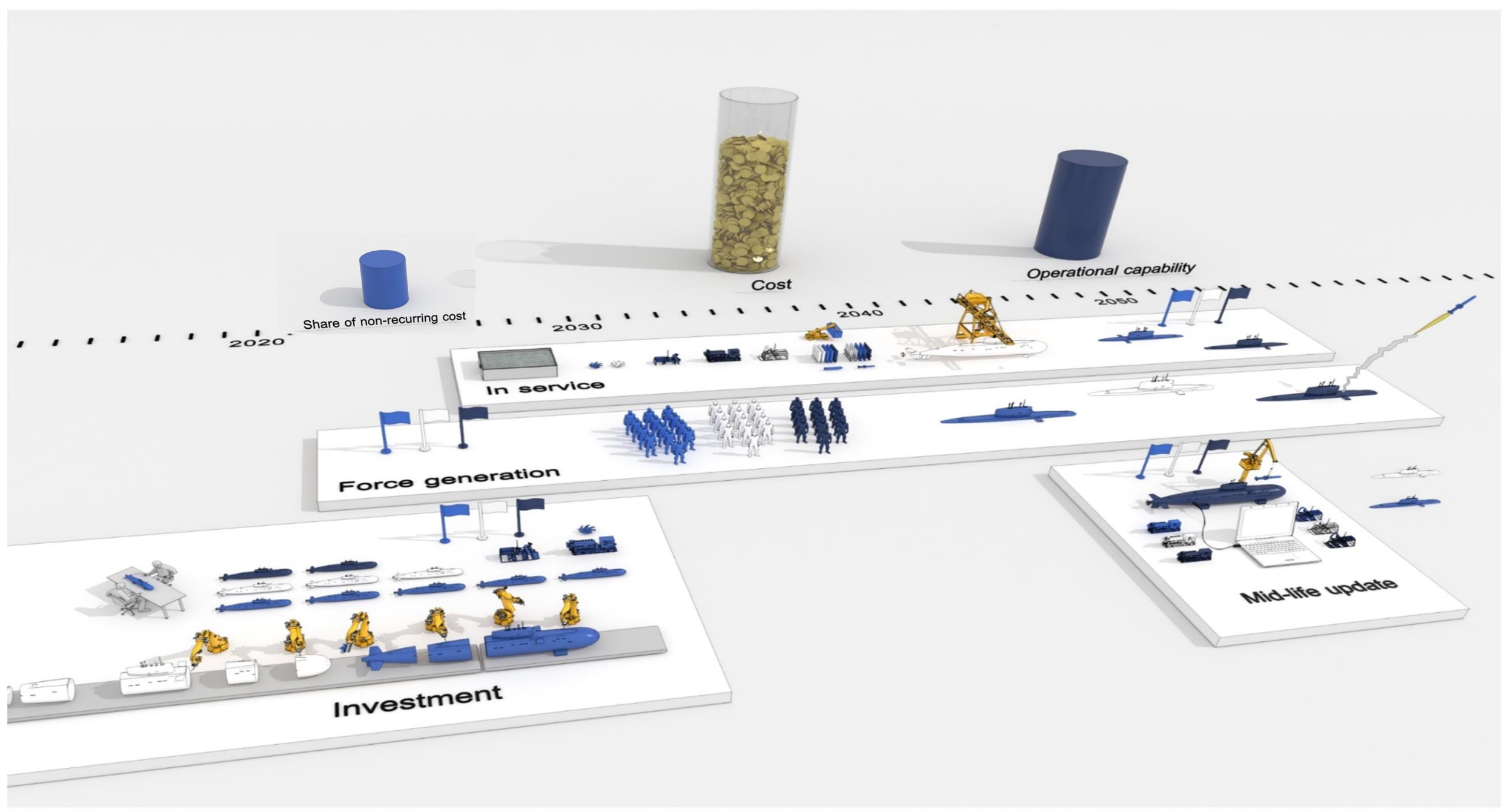
- ✓ Based on U212A
- ✓ Proven components and subsystems
- ✓ Future proof
- ✓ Design margins
- ✓ Improved signatures
- ✓ Improved mobility, range and endurance
- ✓ Improved weapons capacity
- ✓ Focus on sustainability and future relevance



Ambitious , longstanding collaboration in all relevant areas.

Operational Submarines as Main objects





Share of non-recurring cost

Cost

Operational capability

2020

2030

2040

2050

In service

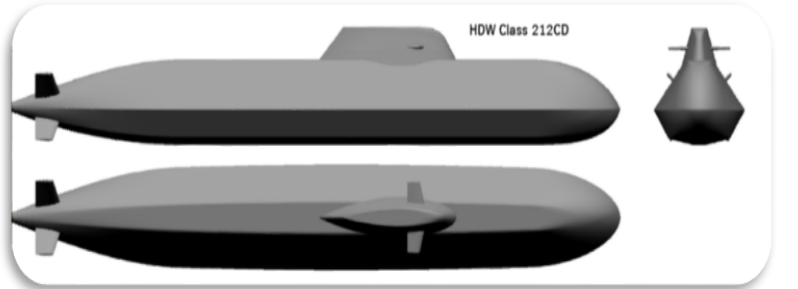
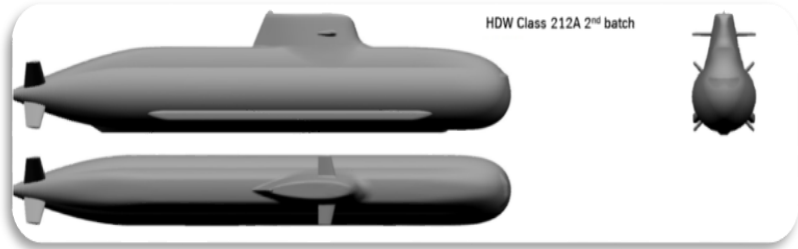
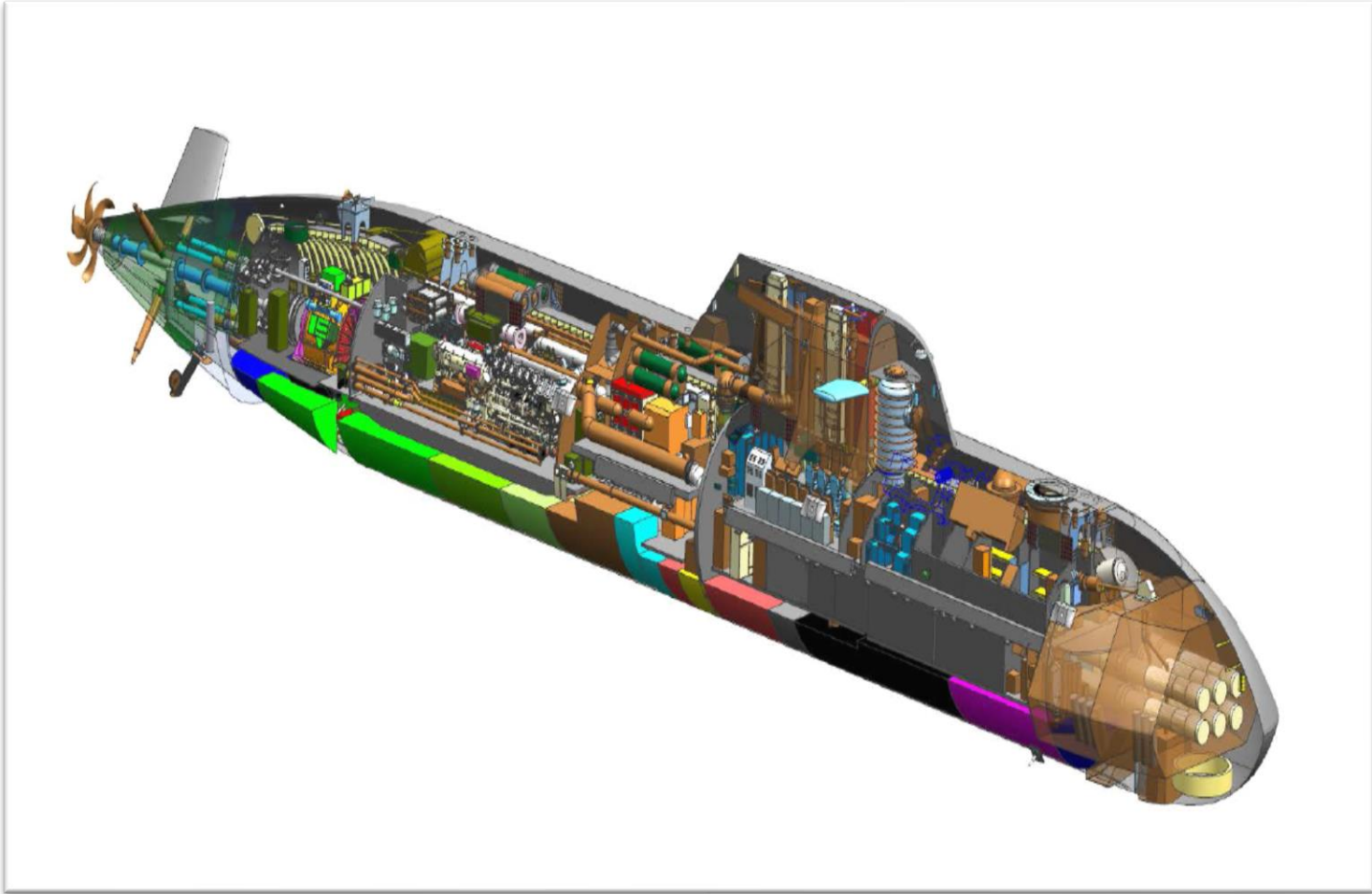
Force generation

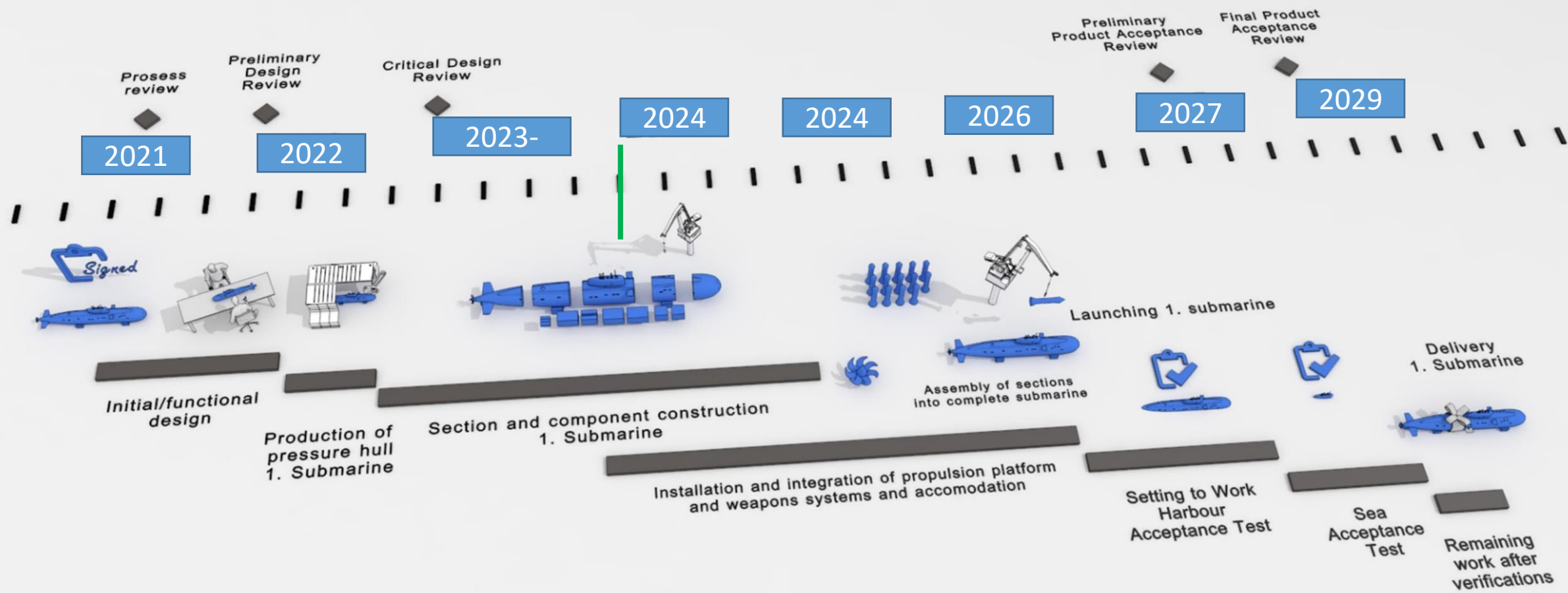
Investment

Mid-life update









2021

2022

2023-

2024

2024

2026

2027

2029

Process review

Preliminary Design Review

Critical Design Review

Preliminary Product Acceptance Review

Final Product Acceptance Review

Initial/functional design

Production of pressure hull 1. Submarine

Section and component construction 1. Submarine

Installation and integration of propulsion platform and weapons systems and accommodation

Assembly of sections into complete submarine

Launching 1. submarine

Setting to Work Harbour Acceptance Test

Sea Acceptance Test

Delivery 1. Submarine

Remaining work after verifications

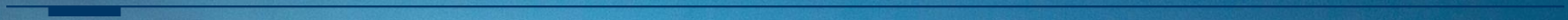
Signed

Evolving of the program..



Navy to navy





TA/PA	Name	Function



ULA
212CD



NSM / FNSM



Other nations



Submarines



Effectors



Navy to navy



Infrastructure



Business
model



Personnel &
competence



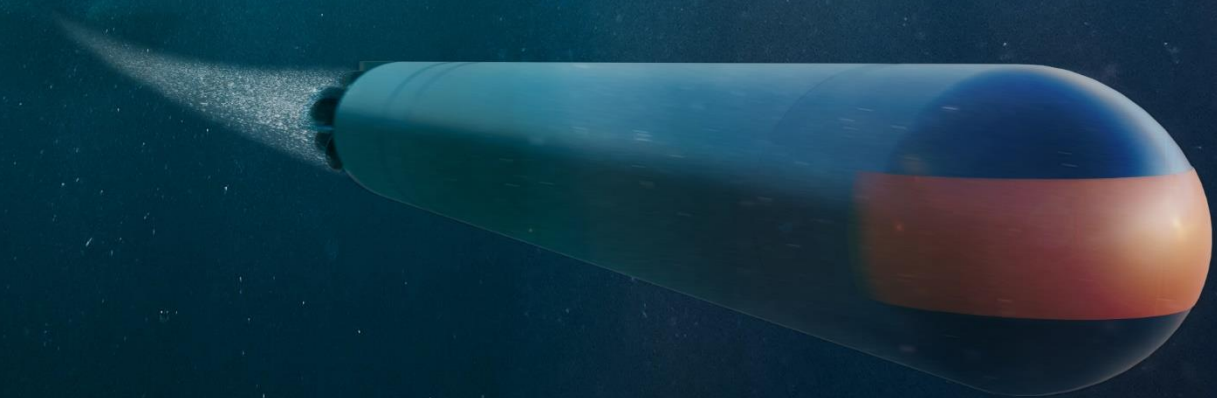
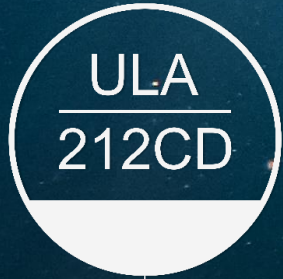
Miscellaneous
& Reports

Submarine and NSM program

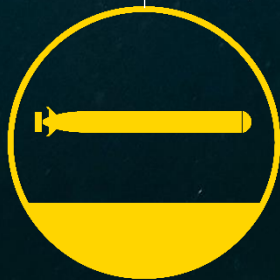


Submarine and NSM program

Return to main menu,
press "ESC"



Submarines



Effectors



Navy to navy



Infrastructure



Business
model



Personnel &
competence

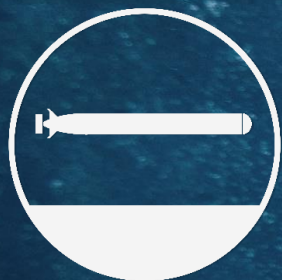


Miscellaneous

Click for next

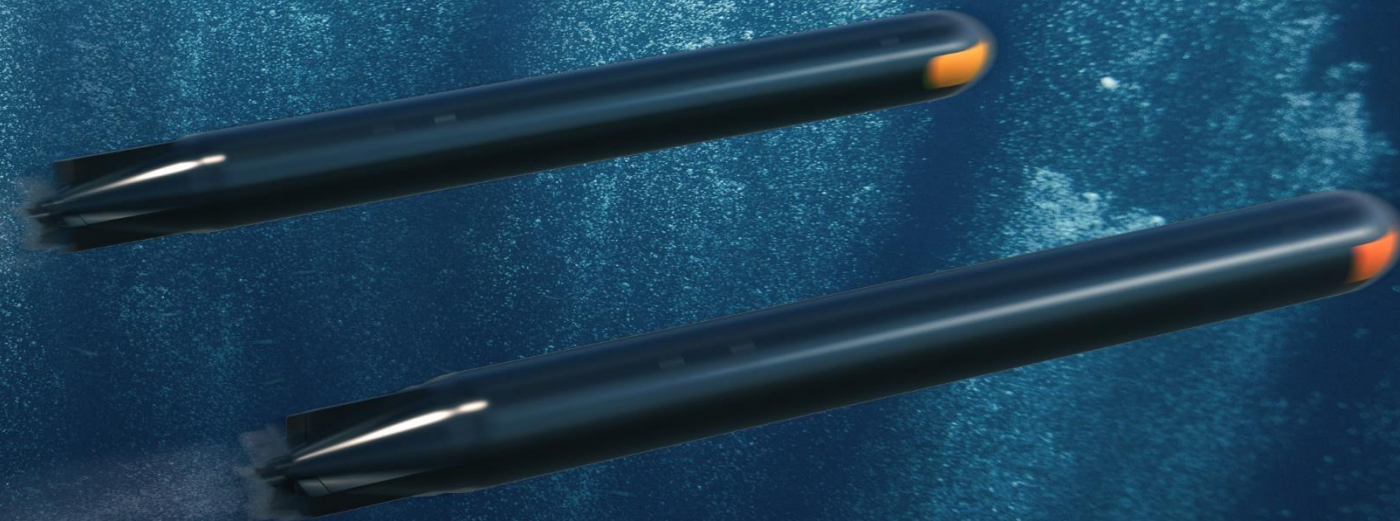


Submarine and NSM program



Effectors

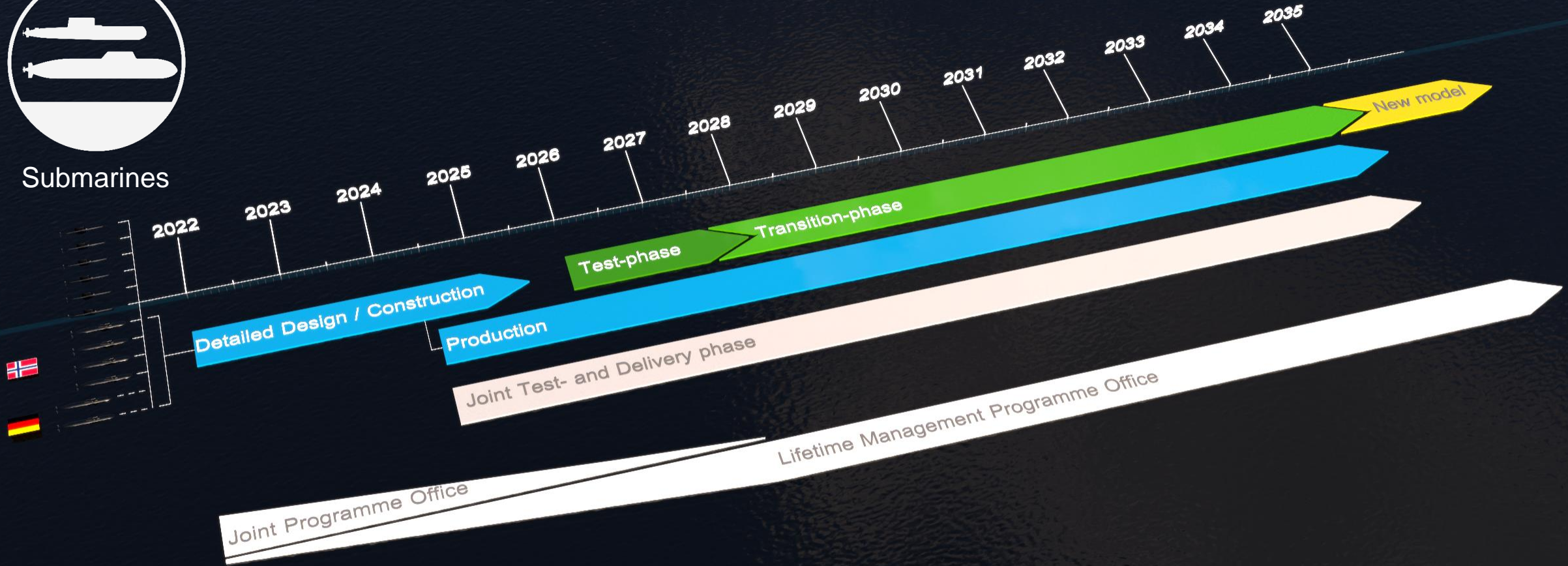
- a. [Torpedo new](#)
- b. [Light missile submarine](#)
- c. [NSM \(Navy Strike Missile\)](#)
- d. 3SM



Submarine and NSM program



Submarines



2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

SART
EFFECT

Test-phase Transition-phase New model



Summary

- ✓ The German-Norwegian submarine project is on track
- ✓ The 212CD will be the new benchmark for conventional submarines
- ✓ The project have been three year under contracts. The design phase are on track. Next milstone by september 2024- passing the CDR milestone
- ✓ Additional partners are welcome to join the cooperation
- ✓ First 212 CD submarine to enter service in 2029
- ✓ Extensive cooperation in service phase reducing the life cycle cost and meeting targeted goals for technical availability for all navies involved

