NRK innslag på Lokalen og Dagsrevyen:

https://tv.nrk.no/serie/distriktsnyheter-rogaland/201910/DKRO99100219/avspiller#t=3m6s

https://tv.nrk.no/serie/dagsrevyen/201910/NNFA19100219#t=17m43s

BLUE LOGIC

AUTONOM FREMTID PÅ TAU

Helge Sverre Eide
Business Development Manager

BLUE LOGIC
Creative
Subsea
Solutions

The future is Autonomous – Autonomous Robots/Drones

BLUE LOGIC

More Data – Artificial Intelligence

Big data er ikke lenger bare for store selskaper, mener big data-sjefen i SAP. Illustrasjonsfoto: Colourbox

BLUE LOGIC

Real-time 3D Scanning – Autonomous systems

GAMLE GATER: Google Street View har som mål å fotografere alle verdens gater med 360-graders kamera. Her har tech lead Daniel Filip i Google Maps båret med seg systemet med 15 kameraer til Machu Picchu i Peru. Foto: REUTERS/Pilar Olivares

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Why Drones?

- Reduce CO2 emissions/footprint
- 24/7 Subsea control and surveillance
- Understanding the Ocean dynamic – Environmental Research and monitoring
- Control and management of floating energy production
- Offshore fish farming – Feeding the world
- Remote control – Offshore work is moved onshore – We can settle wherever we like

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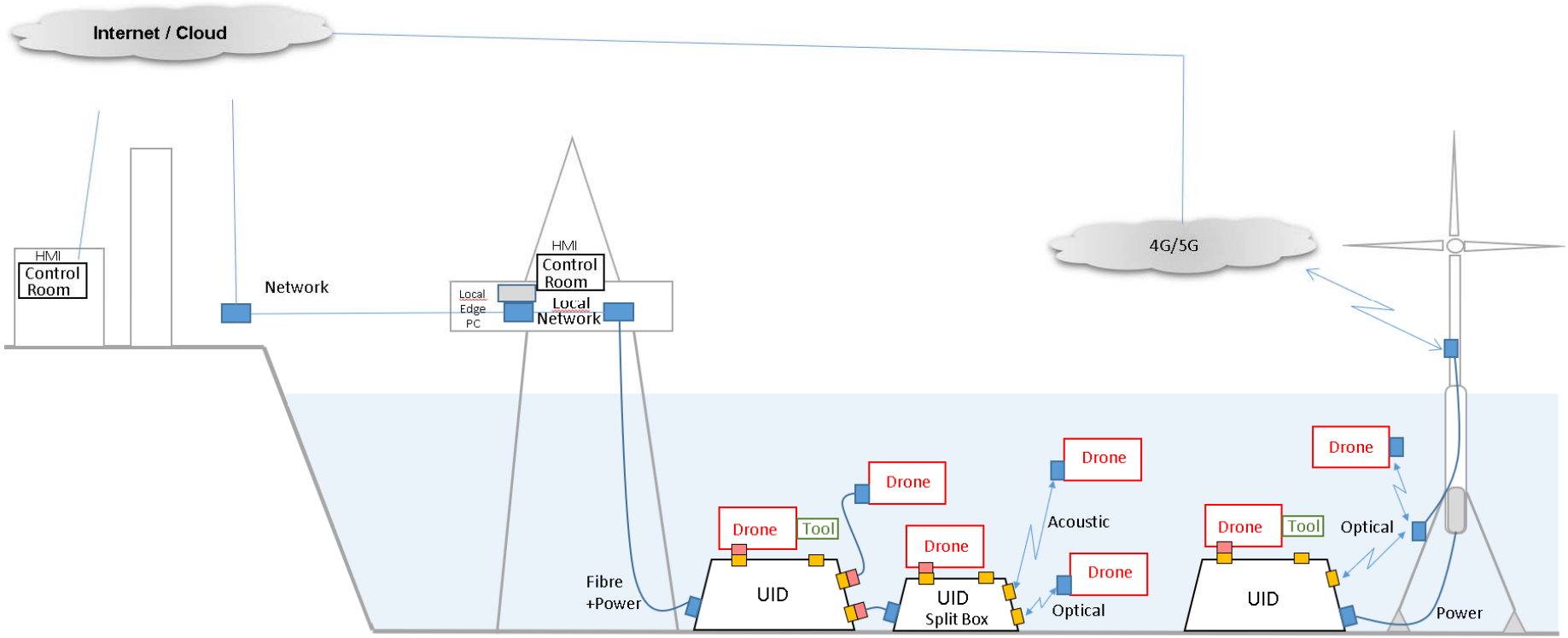
Why Autonomous Charging?



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Drone as a Service - Standardisation is the Enabler

Benefits

- High volume = Lower cost
- Reduced cost of entry = Small companies can drive open innovation
- Increased Quality and Reduced Price
- Reduced cost of change over to new service provider

We need

- Utility provider of Data, Power, and Mechanical connection

Solution

- Subsea Fuel Station that all can access
- Subsea Quay that can host all Drones
  i.e. Universal Docking Station with “Subsea USB” (Utility Network)

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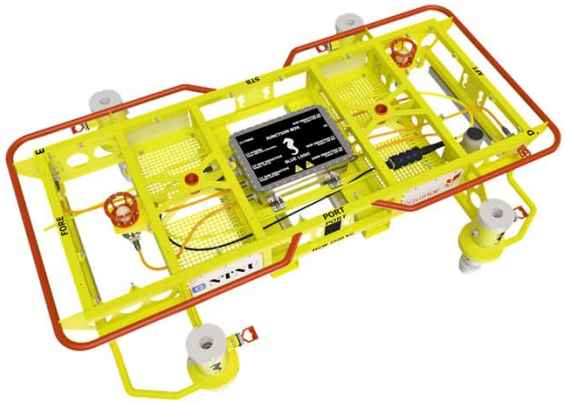
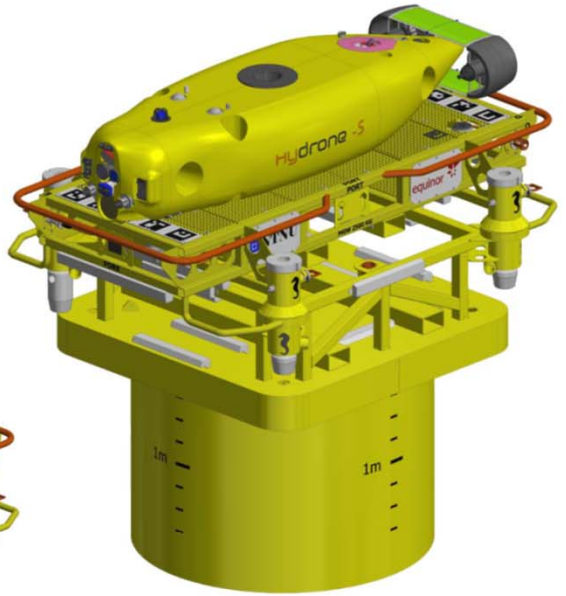
One Shape Fits All

- Flat Standard
- All support the way forward





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One Shape Fits All

SWiG STANDARD INTERFACE

energy API

Shell

equinor

Chevron

AkerBP

wintershall
Shaping the future.

vår energi

TOTAL

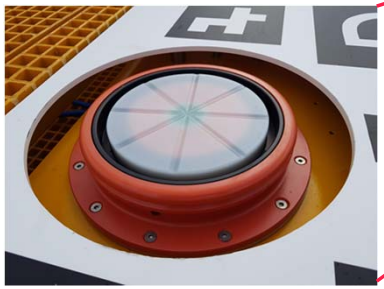
Lundin Petroleum

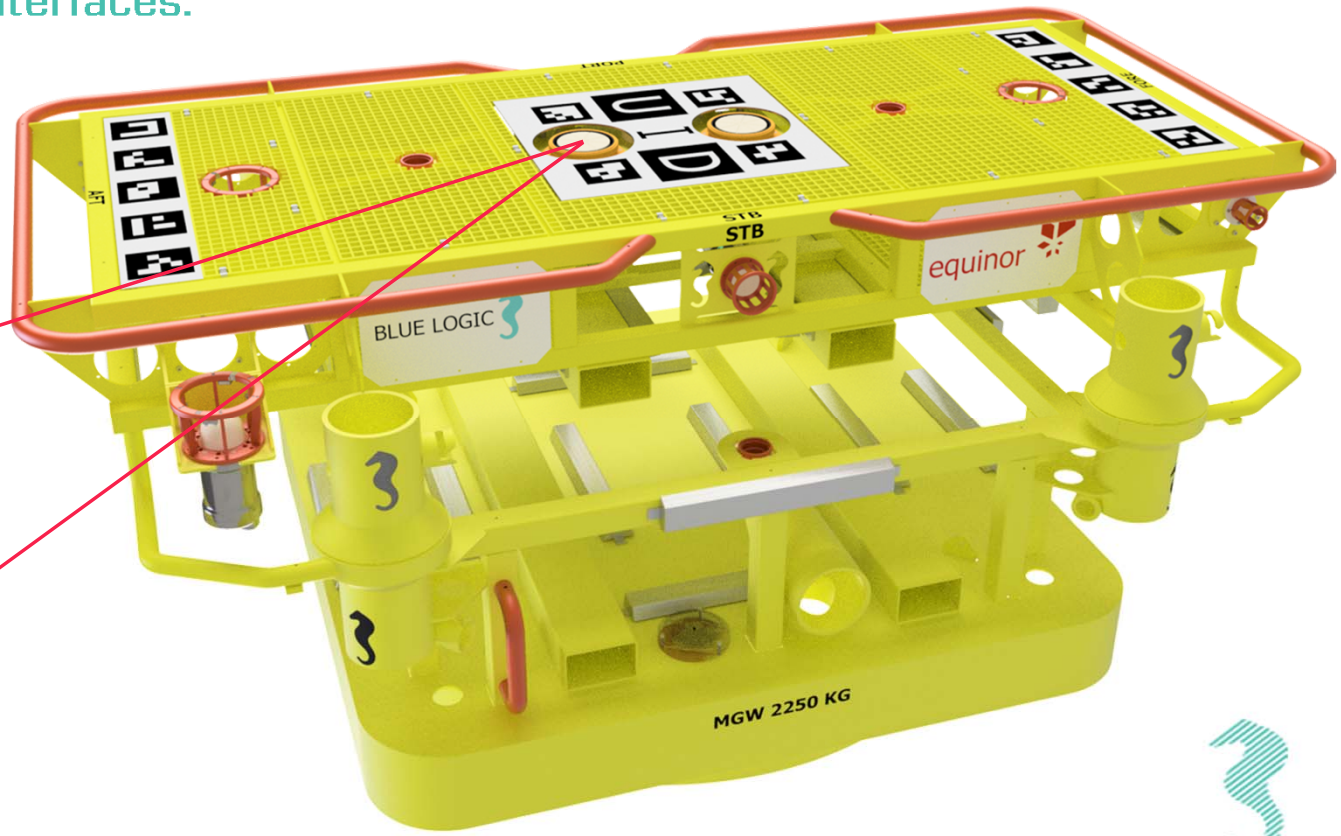
BLUE LOGIC

One Shape Fits All

Open Innovation with standard interfaces:

- Mechanical
- Electrical
- Network infrastructure





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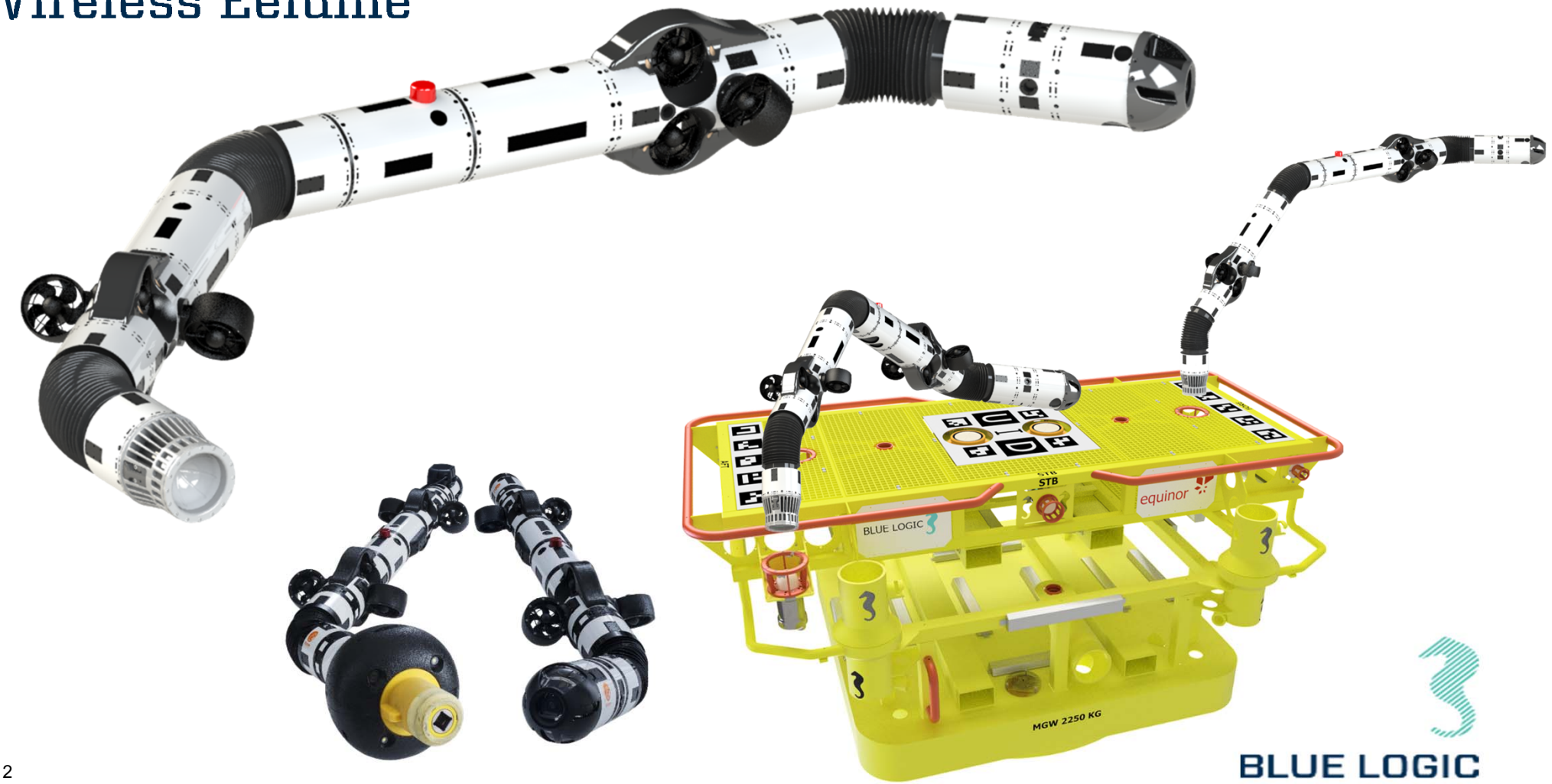
Wireless Eelume



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Test and training center for autonomous air and sea drones

TAU AUTONOMY CENTER (TAC)

BLUE LOGIC

Til lands, til vanns og i luften med

Tau Autonomy Center

- Connecting Sea and Air
- Established to meet the industry's need for testing of air and subsea drones
- Manage of permits to use the Ocean Space and sea floor
- Long term subsea storage of test equipment.
- Provide infra structure for Qualification of autonomy
- Qualification and check out of Air drones minimum number of air time
- Network of service providers that has competence on Drones

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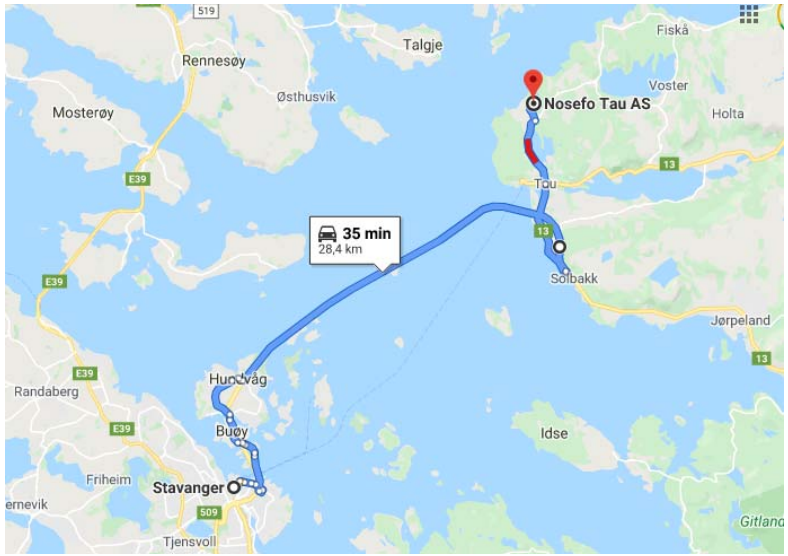
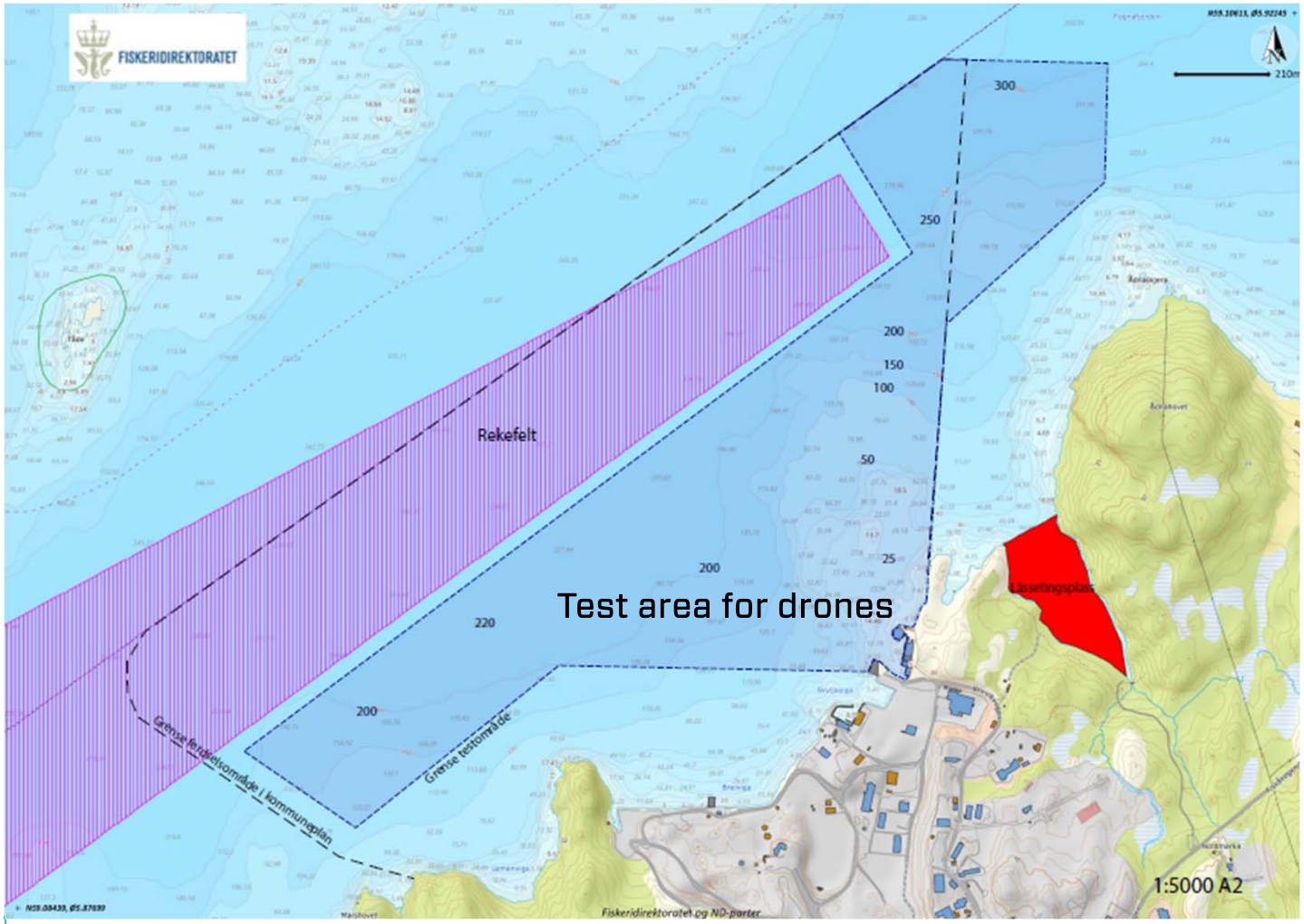
Tau Autonomy Center



Tau is located 30 min drive from Stavanger


FISKERIDIREKTORATET
300
250
200
150
100
50
25
200
220
200
Rekefelt
Test area for drones
Grense fiskeriområde i kommuneplan
Grense testområde
Lossetingsplass
1:5000 A2
Fiskeridirektoratet og ND-partar

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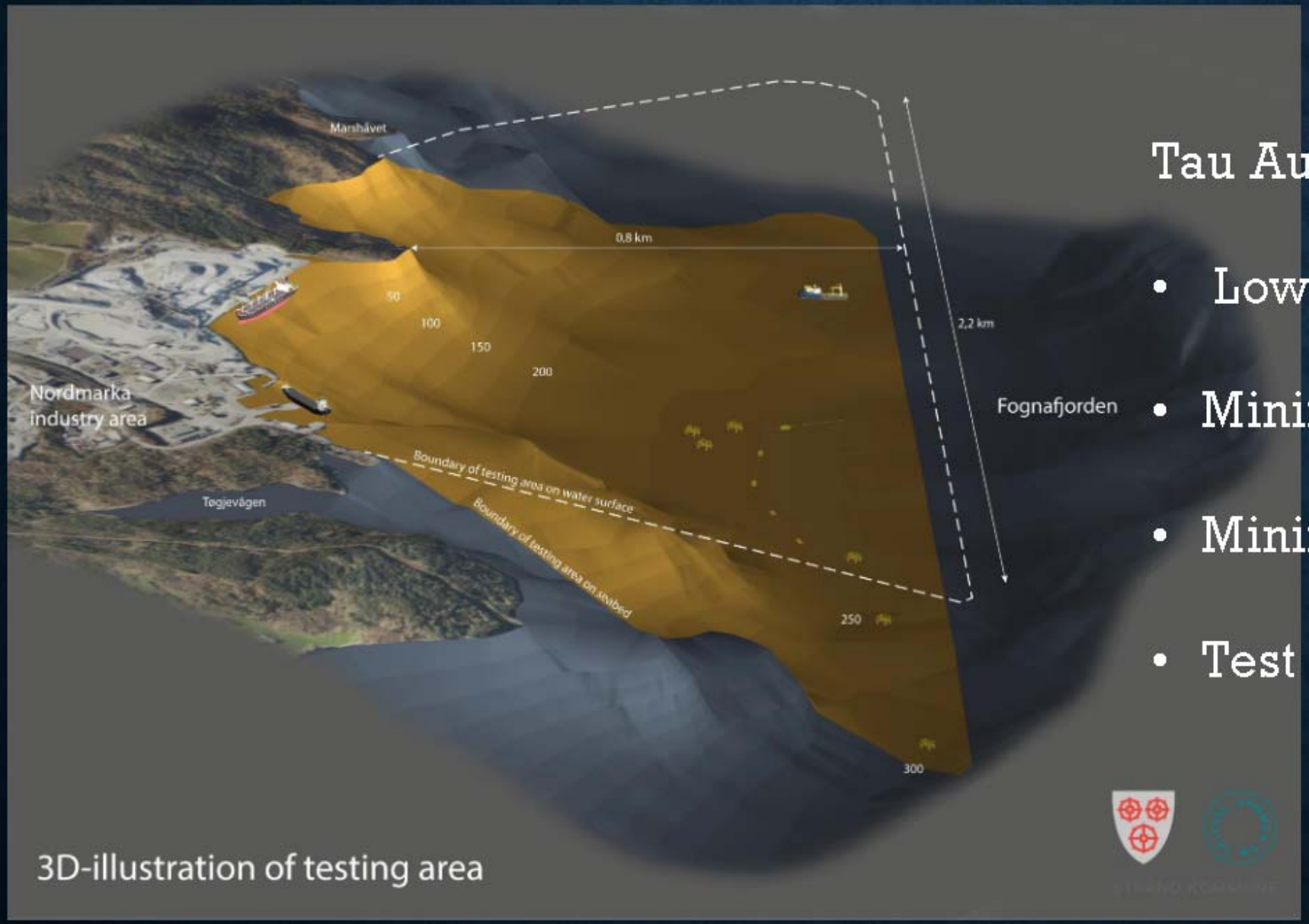
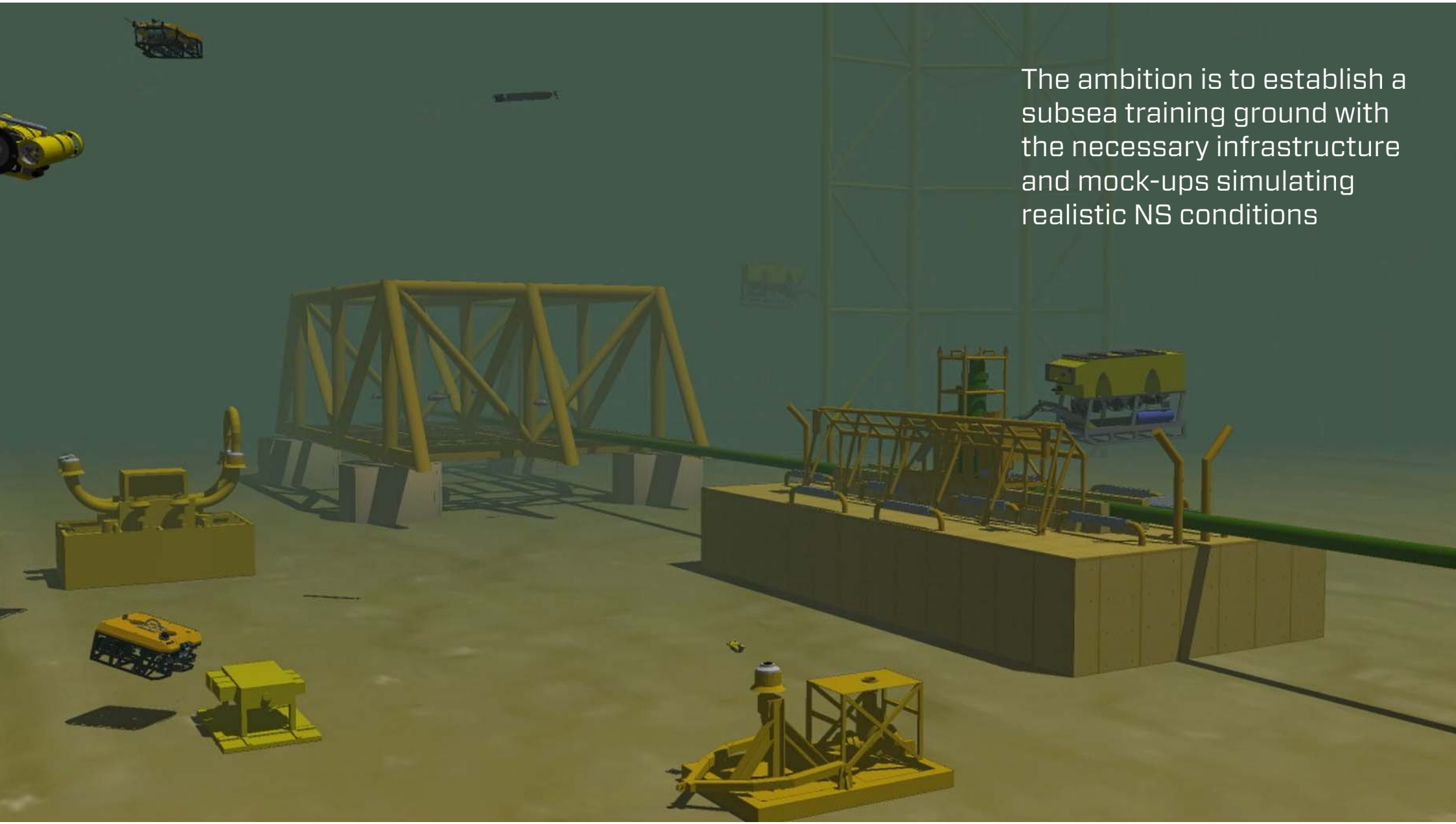


3D-illustration of testing area

Tau Autonomy Center

- Low sea currents
- Minimum of swell
- Minimum tide
- Test area of 2 km^{2}.



The ambition is to establish a subsea training ground with the necessary infrastructure and mock-ups simulating realistic NS conditions

Tau attracted aerial drones for several reasons

- Outside of airport control zone
- Scattered population
- Suitable terrain and objects in area
- Possibility to fly over both land and sea
- North Sea type helideck at Nosefo
- Close to Stavanger

KVS TECHNOLOGIES

Before subsea activities started at Tau, aerial drone companies established a test/ training center in Tau.

KVS Technologies applies smart drones carrying out autonomous inspections and monitoring of power grids. Technology qualification and pilot training is done in Tau.

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NOSEFO

Norwegian Center for Offshore Education

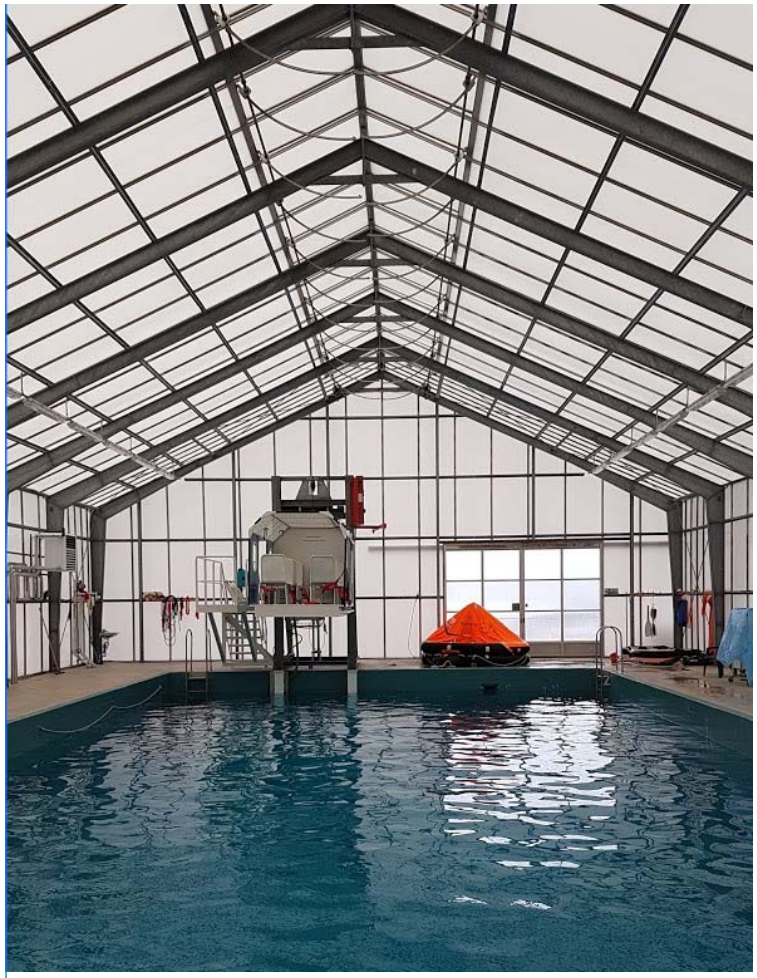
- Infrastructure
- Offices
- Deep water quay
- Utility systems
- Indoor test basin
- Mech workshop
- Test rig with helideck

BLUE LOGIC

Training rig with helideck and free-fall lifeboat

(formerly North East Frigg platform top)

Nosefo indoor training and test basin



BLUE LOGIC

Hva kan vi bidra med i vår region

- Fremtidens industri flytter ut på havet, må arbeiderne da flytte hjem?
- Vi som region må være med på å pilotere fremtidens teknologi

Tau Autonomy Centre (TAC)

Test and training center for autonomous air and sea drones

- Dette trenger vi innen følgende områder
  - Vindkraft
  - Bølgekraft
  - Undervannsgruve drift
  - Offshore fiske oppdrett
  - Miljø overvåking for å forstå havet

- Vi må investere i infrastruktur for å tilrettelegge

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TAC – Link

Følg også link på Facebook

https://www.facebook.com/Tau-Autonomy-Center-TAC-112615106812030/

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