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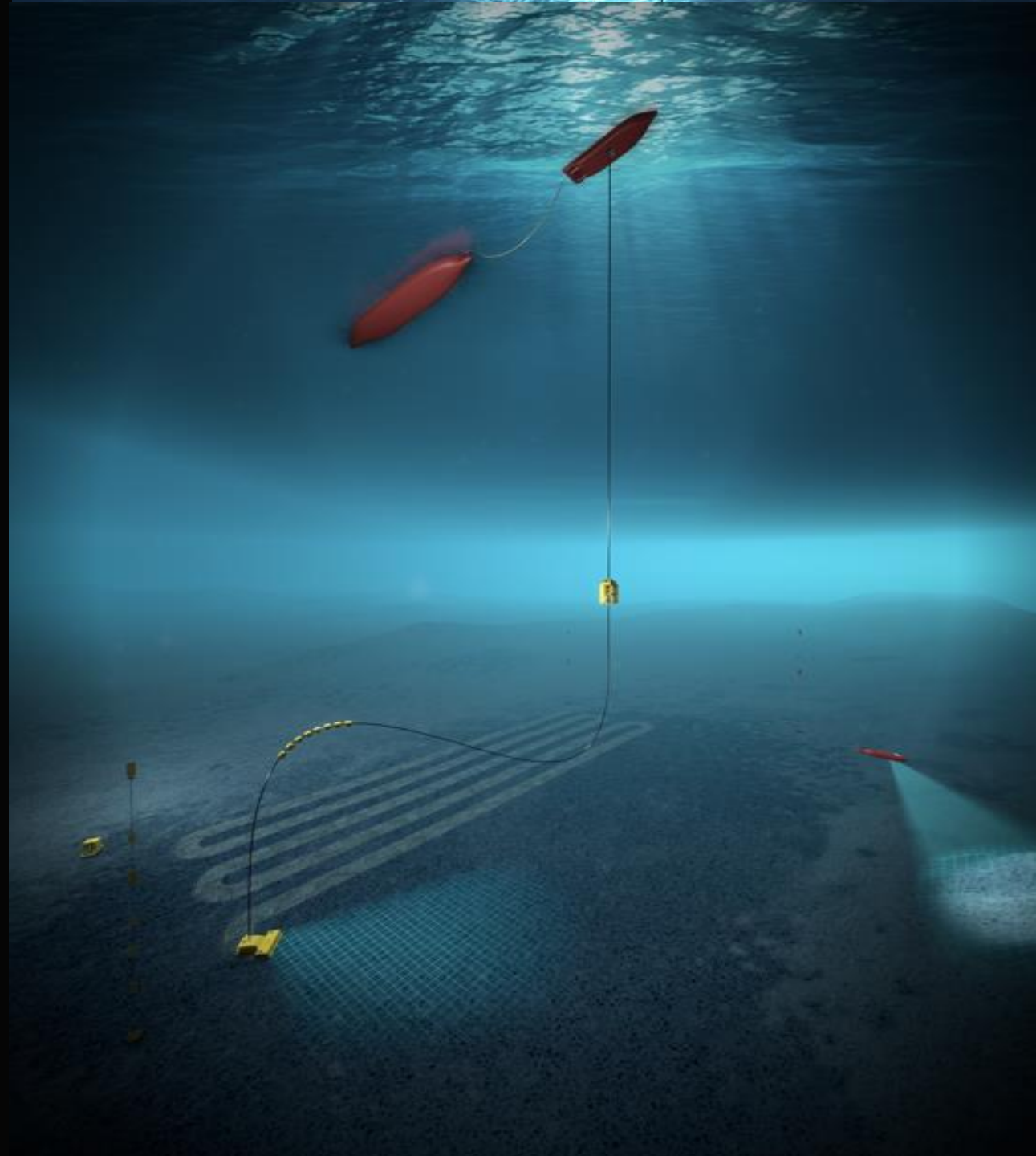
Energiskiftet 2024

22.05.2024



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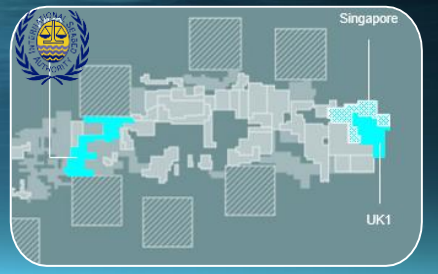
A global leading Deep Sea Mineral Company



Exploration licences

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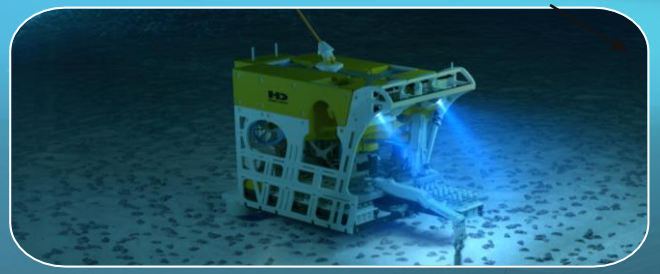

Environmental and resource mapping

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Technology leader

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KONGSBERG

TechnipFMC

National Oceanography Centre

NATURAL HISTORY MUSEUM

Wilhelmsen

NORCE

Strategic partners & investors

Three factors driving the establishment of the seabed mineral industry

The world needs more critical minerals, and it is increasingly important to secure supply from the West

Energy transition

Demand for critical minerals is set to boom because of the expansion of renewable energy production, expansion of power grids and applications of batteries

Troubled supply today

Onshore mineral production is dominated by political high-risk jurisdictions and has a significant environmental footprint, and mixed HSE standards

Security of supply in the West

Strong political drive in the EU and Western world to increase security of supply – prerequisite to reach strategic goals

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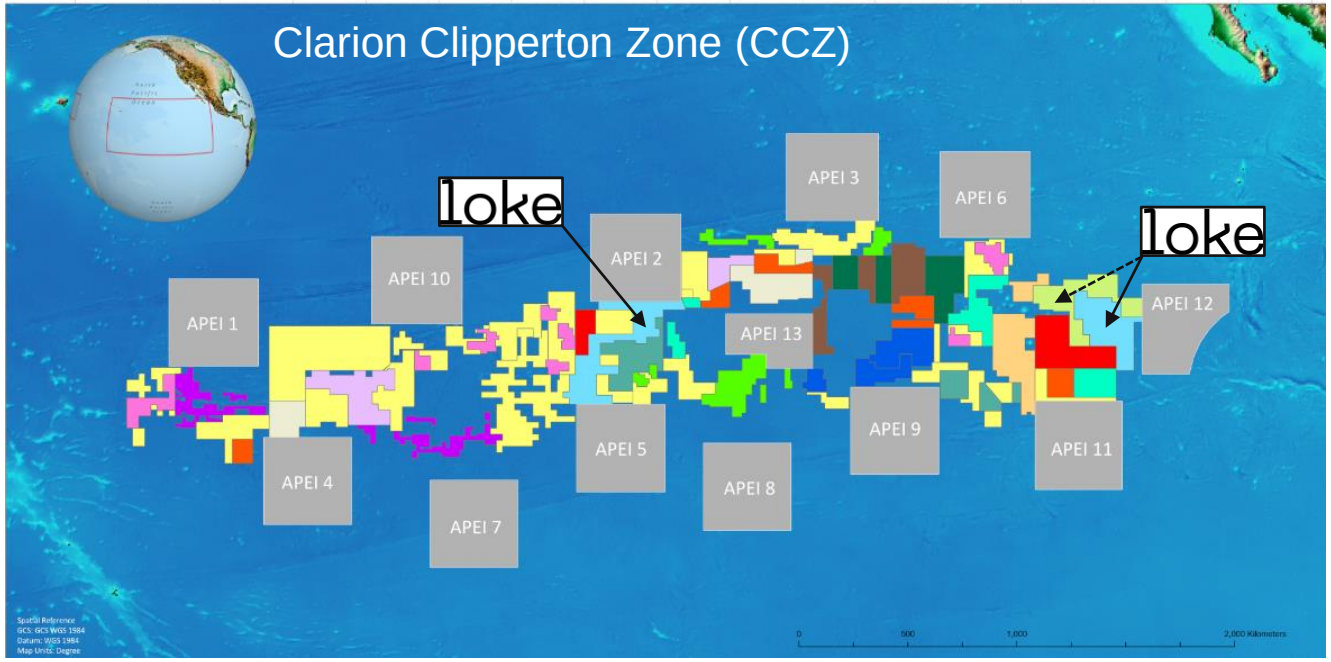
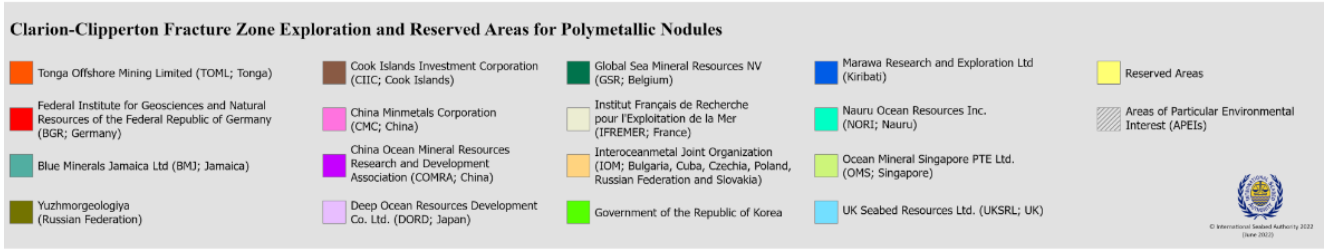
Loke is one of the largest license holders in the CCZ.

CCZ is the most mature and prospective area for Deep Sea Minerals.





- Loke acquired the licenses from Lockheed Martin in 2023, with UK as the sponsor state.
- The licenses holds vast resources of poly-metallic nodules highly enriched with
  - Nickel 1,3 %,
  - Copper 1,0 %
  - Cobalt 0,2 %
  - Manganese 28 %
- These licenses holds more than 10 million tons of Nickel – of the largest resources in the world.
- Lowest technology gap: Significant cross-over from the offshore oil and gas industry
- Main environmental challenge is plume generation during nodule collection – Loke is addressing this with its technology development

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Introducing next generation surveys – Multiple AUV and ROV

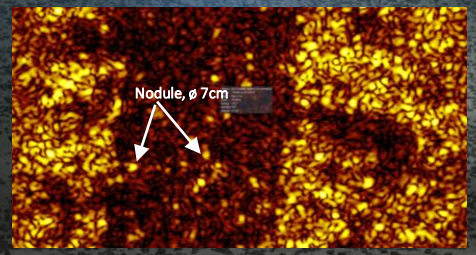
Ship mounted MultiBeam
- Seabed Topography

Unmanned Remotely Controlled Vessel
- Dual operation
  - ROV
  - MultiBeam

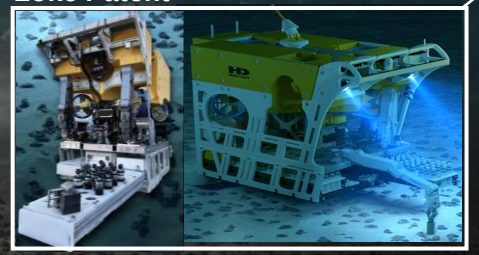
ROV – Digital Box Core
- Nodule abundance
- Geotechnical
- Environmental

Twin AUV operation
- Nodule abundance
- 200 – 300 km^2 / day
- Resolution 3 x 3 cm

Hugin AUV – HISAS picture



Loke Patent



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Nodule Production System

Concept Select milestone achieved

- Loke concept with minimum enviromental impact
- Production capacity of 3 Mtons per year
- First Production 2031
- Scalable : 5-8 vessels per license

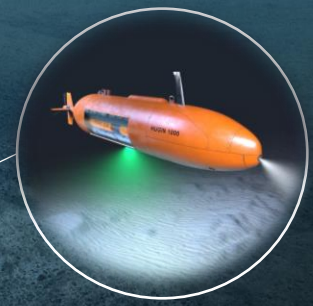
Nodule Production Vessel
Converted drillship

Tandem Offloading

Vertical Transportation System
- Deepwater riser technology
- Air lift technology
- Minimum noise and vibrations
- No sediment return after de-watering

Flexible Jumpers for nodule transfer
- Tool routing and jumper geometry for minimum force and track crossings

Nodule Collector
- Mechanical Collectors for minimum plume
- No sediment discharge from collection tool
- Free swimming for protection of sensitive habitats and enable corridors for biodiversity protection
- No light pollution
- ROV/ Deepwater Robotics Technology
- Autonomous navigation



Continuous Environmental Monitoring
- Adaptive production management through digital twin

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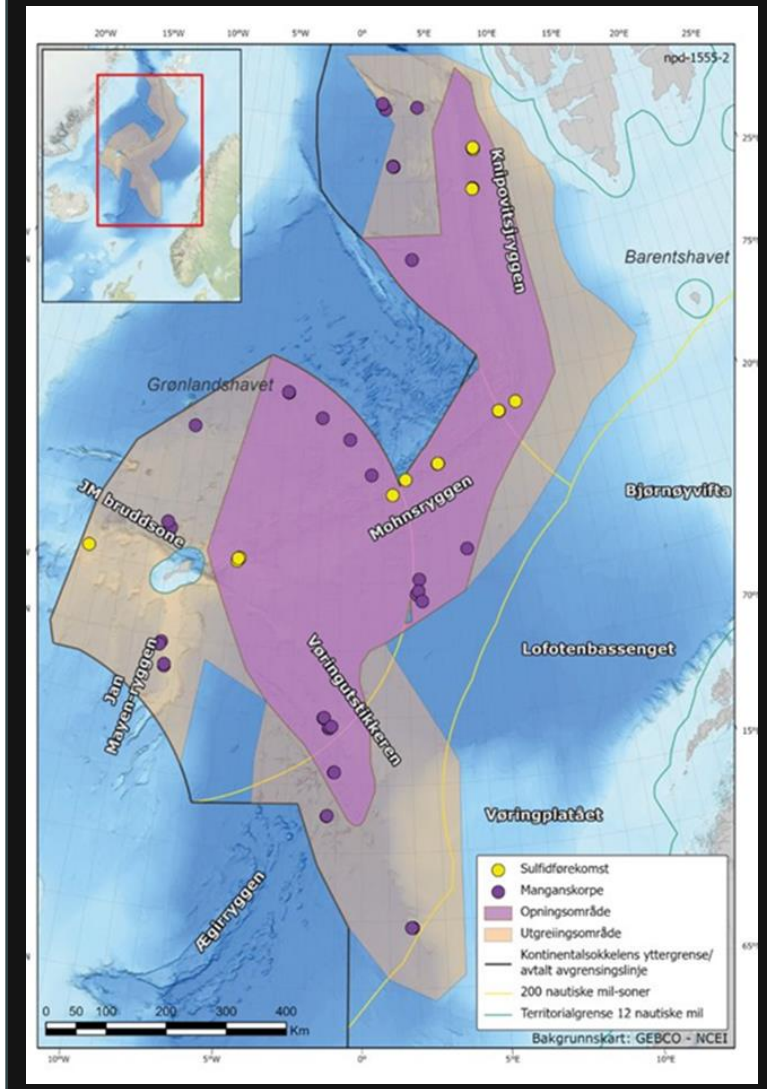
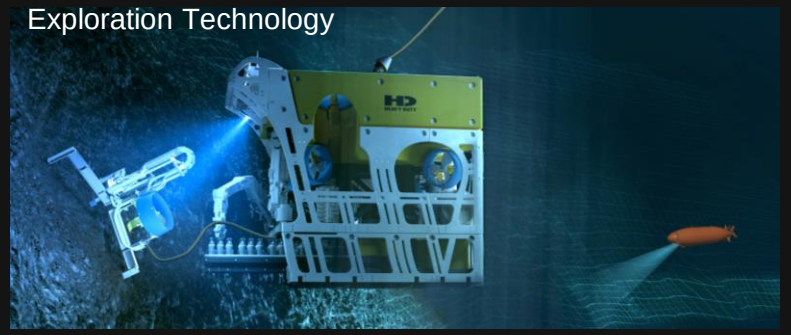
First licensing Round Q3 2024 – Loke will focus on Cobalt enriched crust





Mineral	Volume (tons)
Mangan	185 000 000
Titan	8 400 000
Magnesium	24 100 000
Litium	229 300
Vanadium	1 918 800
Kobolt	3 058 100
Niob	73 000
Hafnium	14 700
Wolfram	80 300
Gallium	19 200
Scandium	55 800
Yttrium	300 900
Lantan	368 800
Cerium	1 681 200
Praseodym	102 500
Neodym	420 300
Europium	23 200
Gadolinium	99 900
Terbium	15 200
Dysprosium	86 400

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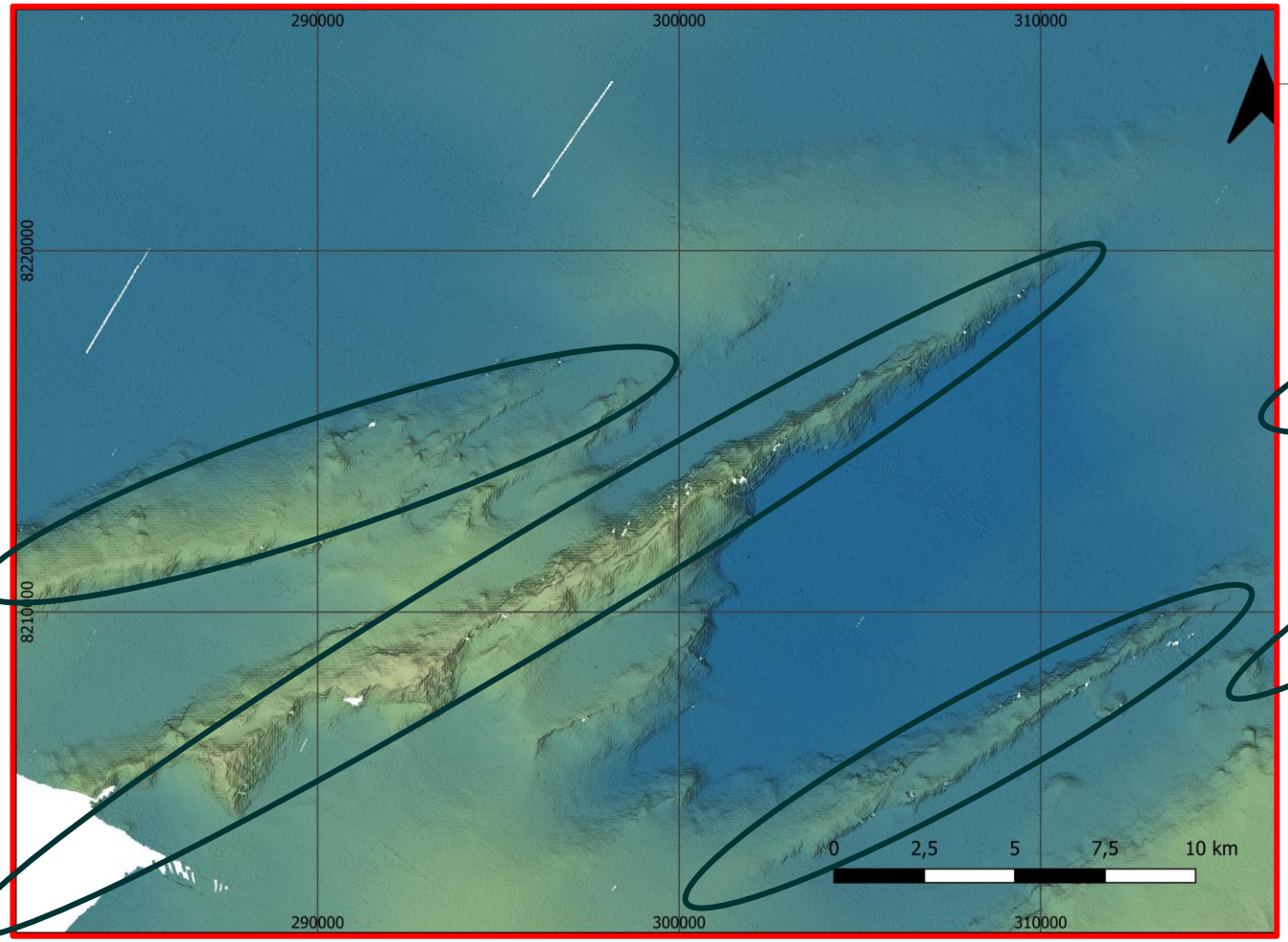
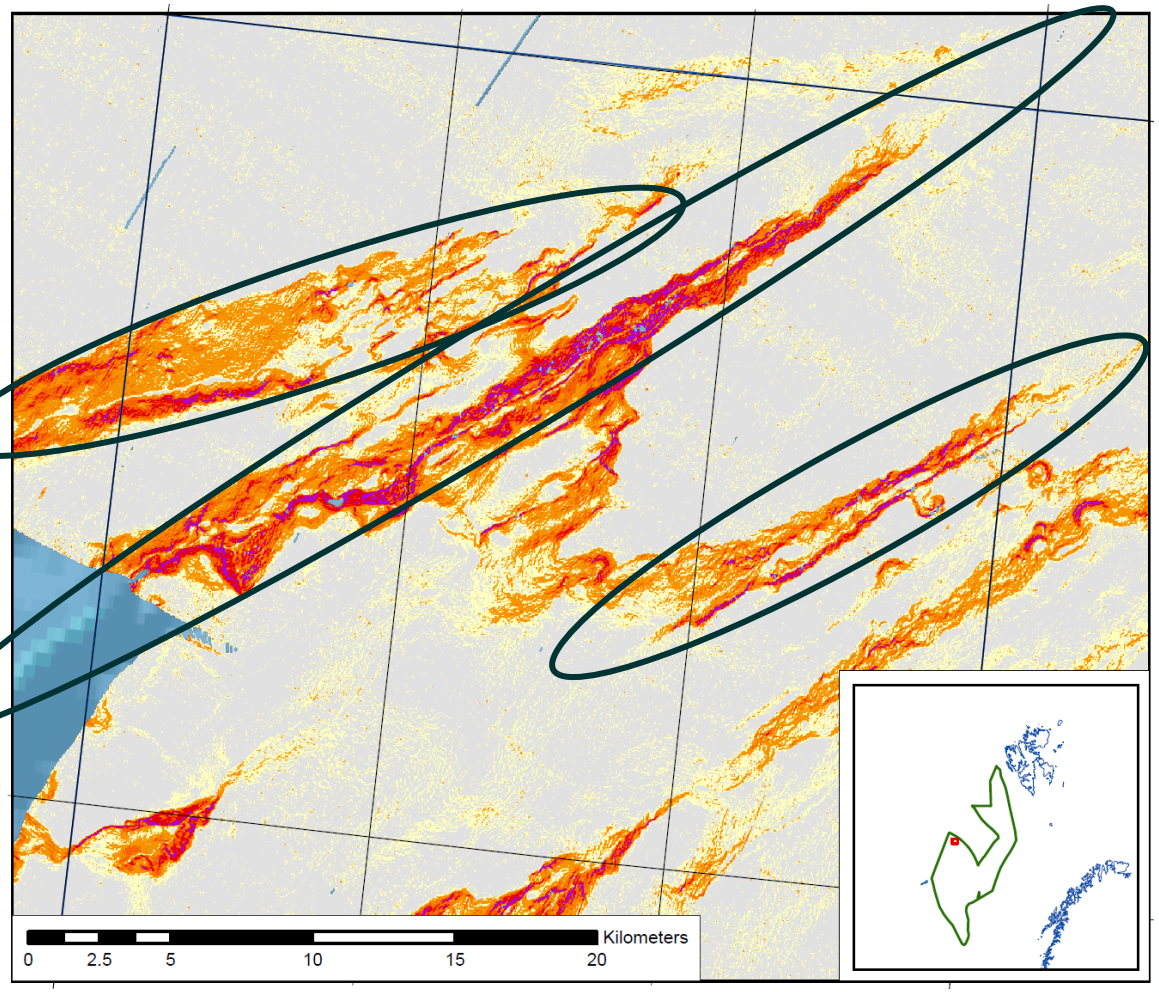
Prospects with decades of production (+50 million tons crust)

Numerous of large prospects with low exploration risk already identified





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