

### Changing subsea-scapes: Scenarios for the Environment

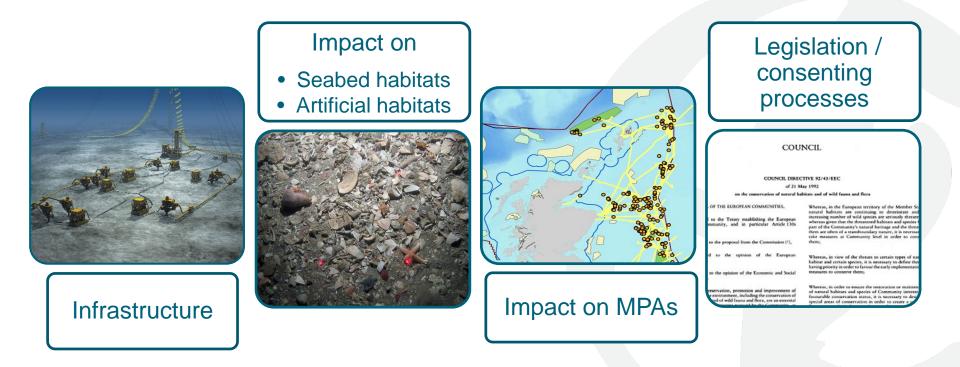
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### The challenge



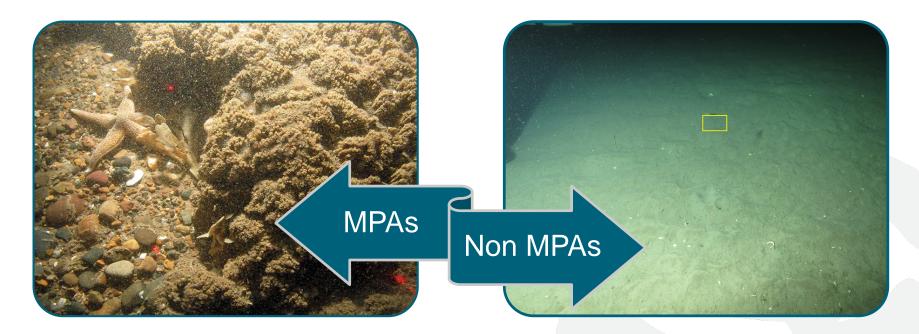
JNCC has responsibility for offshore marine nature conservation, including identifying, monitoring and advising on how protected areas are run and providing advice on the impacts of offshore industries

For decommissioning this includes understanding:





### **MPAs vs outwith MPAs**



- Primary nature conservation obligation is to conserve / recover designated features
- European / national assessments related to sites and wider network of MPAs

- Nature conservation obligations through OSPAR T&D, NERC Act, marine plans
- EIA considerations
- Wider scale of interest, eg oil and gas networks, MSFD

## **Surface structures / pipelines**





#### THE PRINCIPLE Full removal to clean seabed

#### THE PRACTICE -STRUCTURES

- Disturbance of drill cuttings
- Protected species / habitats on infrastructure?

### **Buried pipelines**





#### THE PRINCIPLE Leave in place Quasi-clean seabed

#### THE PRACTICE

- Potential for future spanning – need understanding of historic movements
- Monitoring responsibilities

# **Partially buried pipelines**





#### THE PRINCIPLE Case by case – leave seabed in best condition whether bury or remove

#### THE PRACTICE

- Reportable spans / surface exposure
- Likelihood of future spanning
- Potential monitoring responsibility
- How to resolve in mobile sediments

### **Mattresses**





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THE PRINCIPLE Case by case – leave seabed in best condition possible whether bury or remove

#### THE PRACTICE

- Structural integrity of types of mattresses
- Technical feasibility of removing mattresses
- Habitats and ecosystem services provided
- Total energy / waste budgets

# Questions



- Assessment in mobile sediments / patchy habitats
- Differences in assessment of NNS / CNS / SNS
- How to focus assessment on habitats and features of conservation interest
- Understanding the MPA ecological network coherence compared to potential wider ecological network of in situ infrastructure (MSFD)
- The role of ecosystem services in assessing decommissioning options, especially in MPAs

