Pilot description:
New Nuclear for Maritime decarbonisation

- **Pilot owner:** OSM Thome
- **Background – why this pilot?:**
  - The maritime industry is under pressure to decarbonise its operation. There are several solutions available for short sea operations, but the limitations are more obvious for deep sea operators which represent more than 85% of maritime carbon emissions. Several studies have been carried out on ammonia, methanol, and biofuels while a deep dive into a nuclear alternative now should be carried out. The scope of this pilot should be scrutinizing new advanced nuclear energy technology, safety aspects, impact on design and possibilities, cost aspects, scaling potential, and high-level timeline for potential implementation
- **Final implementation of the pilot:**
  - Determine if new advanced nuclear energy technology can be responsibly used in the maritime industry, when could this happen, and what are the main obstacles preventing it from being realised
- **Aim of the pilot study:**
  - Execute a thorough techno/economical and safety pre-study of advanced nuclear energy technology as a first step towards realisation. Describe investment needs and model for ROI
- **Main activities of the study:**
  - Desk-top study of using new advanced nuclear energy for maritime projects, at sea and in port
  - Describe the potential green solution, new advanced nuclear energy in combination with efficiency measures and optimised design
  - Mapping of technical, financial, and related risks connected to chosen solution
  - Identify possible hurdles related to voyage, relevant ports, and vessels
  - Identify key vendors for possible realization of the pilot
  - Develop a high-level plan for bringing new advanced nuclear energy into use
  - Reporting and dissemination of results
- **Deliverables:** A report in Word and PowerPoint format
- **Required pilot participants:** OSM Thome and DNV
- **Typical other participants:** Shipowners, charterers, ports, yards, technology providers, research institutions, finance institutions, insurers, public entities such as NMA and potentially ENOVA or similar international institutions