The TROPOS Project, 2012-2015

The TROPOS Project aims at developing a floating modular multi-use platform system for use in deep waters, with an initial geographic focus on the Mediterranean, Tropical and Sub-Tropical regions, but designed to be flexible enough so as to not be limited in geographic scope. The modular approach will allow to integrate a range of functions from 4 different sectors (TEAL): Transport (T), Energy (E), Aquaculture (A), and Leisure (L). 3 different concepts were developed by combining particular TEAL functions, named Green & Blue, Leisure Island, and Sustainable Production. Each platform concept consists of a central unit, fixed modules and free-floating satellites. The design of the central unit is similar for all scenarios, but the combination of modules and satellites varies. For 2 of the concepts, appropriate tentative sites were chosen based on numerical and physical modelling: Gran Canaria-Spain (Leisure), Crete-Greece (Green & Blue), and Liuqiu Island-Taiwan (Green & Blue).

**TEAL Components**
- **Transport**
- **Energy**
- **Aquaculture**
- **Leisure Island**

**Concepts**
- Green & Blue
- Leisure Island
- Sustainable Production

**Locations**
- Gran Canaria, Spain
- Crete, Greece
- Liuqiu Island, Taiwan

**Design**

**EIA Procedure**
- Screening: Prepare initial evaluation
- Scoping: Define list for further EIA
- Prediction and Mitigation: Identify impacts and possible mitigation measures
- Draft EIA
- Refine the design of the sustainable multi-purpose TROPOS platform

**Environment & Society**

Multi-use platforms will generate a series of impacts that accumulate at one location and will thus need proper assessment, for all disciplines but also as a whole. These impacts may involve positive and negative effects on environment, society and economy. Accordingly, environmental as well as socio-economic impacts of the TROPOS platform scenarios will be assessed. The environmental impact assessment (EIA) methodology will build on but also differ from those applicable to single-use platforms. Multi-use (vs. single use) may offer the opportunity for enhancing synergies and reducing negative impacts, e.g. by joint logistics.

**Societal Issues**

**Methodology**
- Survey for social acceptance and perceived impacts.
- Questioning of local and regional key stakeholders, local residents and tourists.
- Cost-benefit analysis.
- Multi-criteria decision analysis.

**The TROPOS Project**
- Project cofinanced by the European Commission under the Seventh Framework Programme
- Call: FP7-OCEAN-2011
- Project Duration: 3 years
- Project Budget: € 6.8 M
- EC Contribution: € 4.9 M
- 20 partners from 9 countries