Justification Report Template (Maximum 2 pages)

1. Combination: Aquaculture & Oil and Gas

2. Basin selected: Mediterranean

3. Description:

This synergy needs to be carefully managed since there is continuous leakage of water and also some contaminants. In most EEZ's this is regulated in order to ensure that the leakage does not contain toxic materials, however with these regulations in place one needs to assess the impact that chemicals would leave on the aquaculture species.

Although it would be difficult to introduce aquaculture close to the oil and gas platforms due to contaminates entering the water, the pipelines that run from the platforms to the shore could be used for the farming of bottom dwelling species, such as lobsters. Further, the pipelines themselves could act as anchoring points for above water aquaculture structures. Alongside with this, the idea behind this combination is to eventually use retired oil and gas platforms is turned over into an aquaculture platform.

3.1 Technical

- Because of the leakage problems, aquaculture production in larger distance from the active platforms but still within a reach where the platform can provide something for the farm can be one of the focus. To use the area of the platforms to produce fish for restocking also can be an option.
- Oil and gas platforms are durable and retired platforms can be even retrofitted to facilitate an aquaculture hub. The platform itself can also be used for recreational purposes and can be converted into fishing and diving hotel. The advantage of an oil and rig platform is that is can be easily accessed by a helicopter, this saves time and money on fuel of boats.

3.2 Socio-economic

- Skilled labour availability
- Creation of jobs
- Create new opportunities also for sports such as fishing and diving
- Estimated Gross value added
- Increased food production

3.3 <u>Environmental</u>

- Joint logistics reduce environmental footprint
- Floating structures have less impact on the sea floor
- Offshore aquaculture has less impact on the coast
- Offshore platforms support one of the most prolific ecosystems

3.4 <u>Financial</u>

- Joint logistics for erection, supply and maintenance save costs
- Introduction of new revenue
- Boost EU's aquaculture industry



- Oil and gas production declining, therefore using platforms for other initiatives will boost the investment coast in oil platforms
- Strong interest by stakeholders/businesses in the concept

4. Multi-use platform concept

A combination of aquaculture and oil and gas can be considered as multi-use of space even if they don't use exactly the same space in the same time. The scale of the concept should kick off with on a small scale project to test the impacts of both industries on each other

- **5.** Key threats/challenges to be solved
 - Risk of contamination of aquaculture products for human consumption
 - Interaction between aquaculture and oil and gas platform not yet known
 - Safety concerns of workers
 - Operational problems caused by the combinations are not researched
 - Impacts insurance opportunities
- **6.** Costumer/societal problem that can be solved by combining the sector
 - Ease aquaculture pressure from the coastline
 - Better image for both industries

