

# Monitoring the Maltese Trawl Fleet Catches Using the Fisher Self- Sampling Approach

Ministry for  
Resources and  
Rural Affairs

Għaqda  
Koperattiva  
tas-Sajd

# Aims of the Case Study

- Enhance the available knowledge on the 25 NM FMZ
- Increase the involvement of fishery stakeholders in the management and control of the FMZ
- Implementation of the first fisher self-sampling regime
- **Analysis of the spatio-temporal variation in maturity and length frequency distribution of the species under study to identify nursery and spawning areas**

# Target crustacean species to be studied



*Pacifastacus lenisimus*

# Target fish species to be studied



*Merluccius merluccius*  
*Mullus barbatus*

# Area of the Case Study



# Vessels in the Case Study

- At present there are 22 trawlers registered in Malta
- 11 trawlers fish within the 25 NM FMZ
- 7 trawlers fishing within the 25 NM FMZ are represented by the cooperative Ghaqda Koperattiva tas-Sajd



# Data Collection - I

- A **workshop** will be organised by MRRA to provide the necessary training to the fishers.
- A **2-month pilot phase** will be held before the operational phase. MRRA staff will be sent on board to provide further training to the fishers.
- After the 2-month pilot phase we will enter the **12-month operational phase**. During this period the fishers will be carrying out the self-sampling and supplying the recorded data and samples to MRRA.
- Data will be **cross-checked for consistency**



# Data Collection - II

Two different types of data will be collected:

1. Data on total catch, equivalent to the logbook data
2. Detailed sampling of all hauls carried out during a predetermined monthly fishing trip per vessel.





# Data Analysis

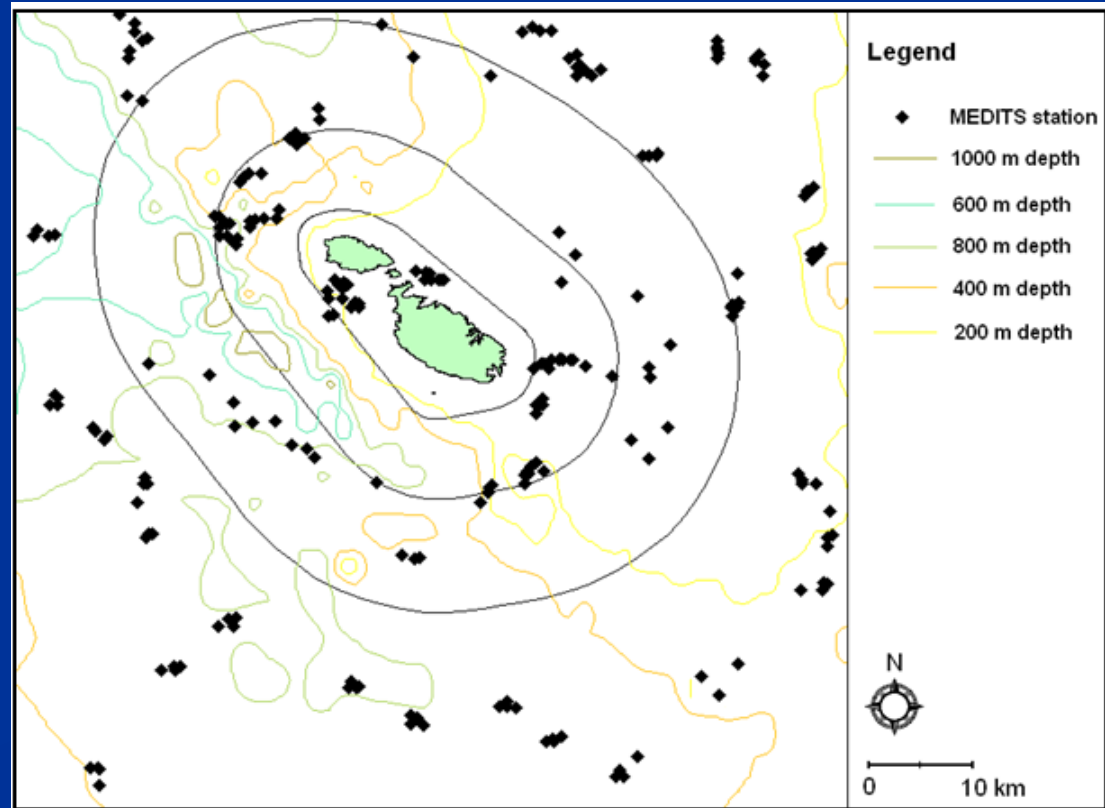
- At the end of the operational phase, MRRA will analyse the data and disseminate the results to the participating fishers.
- A second workshop will be conducted in order to provide a platform for a joint discussion of results and propose potential management approaches.

# Role of Scientists in the Case Study

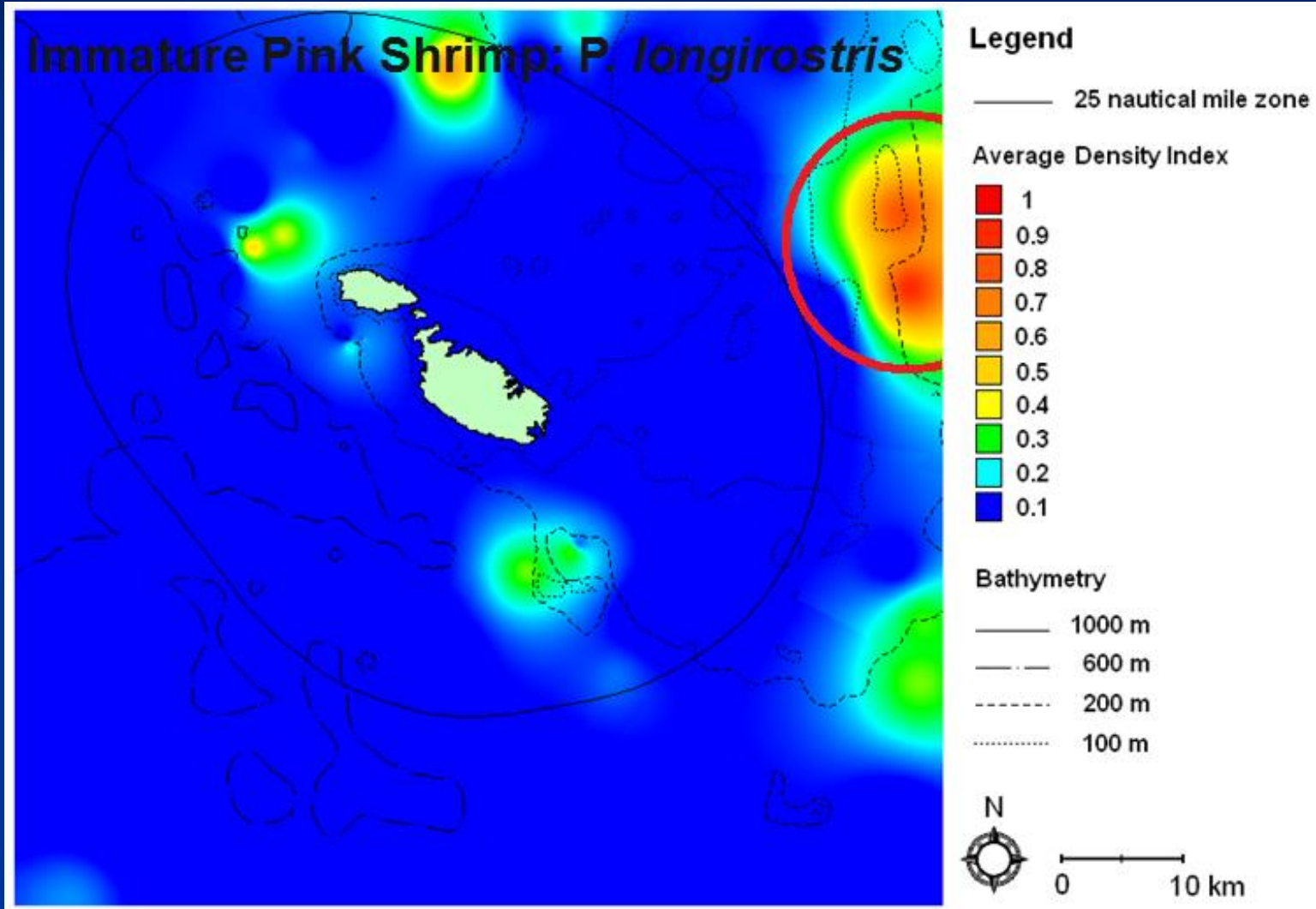
- Informing the stakeholders of underlying policy frameworks where necessary
- Data analysis
- Compilation of relevant existing data regarding **GSA 15**; including both **fisheries dependent and fisheries independent data**.

# MEDITS Trawl Survey

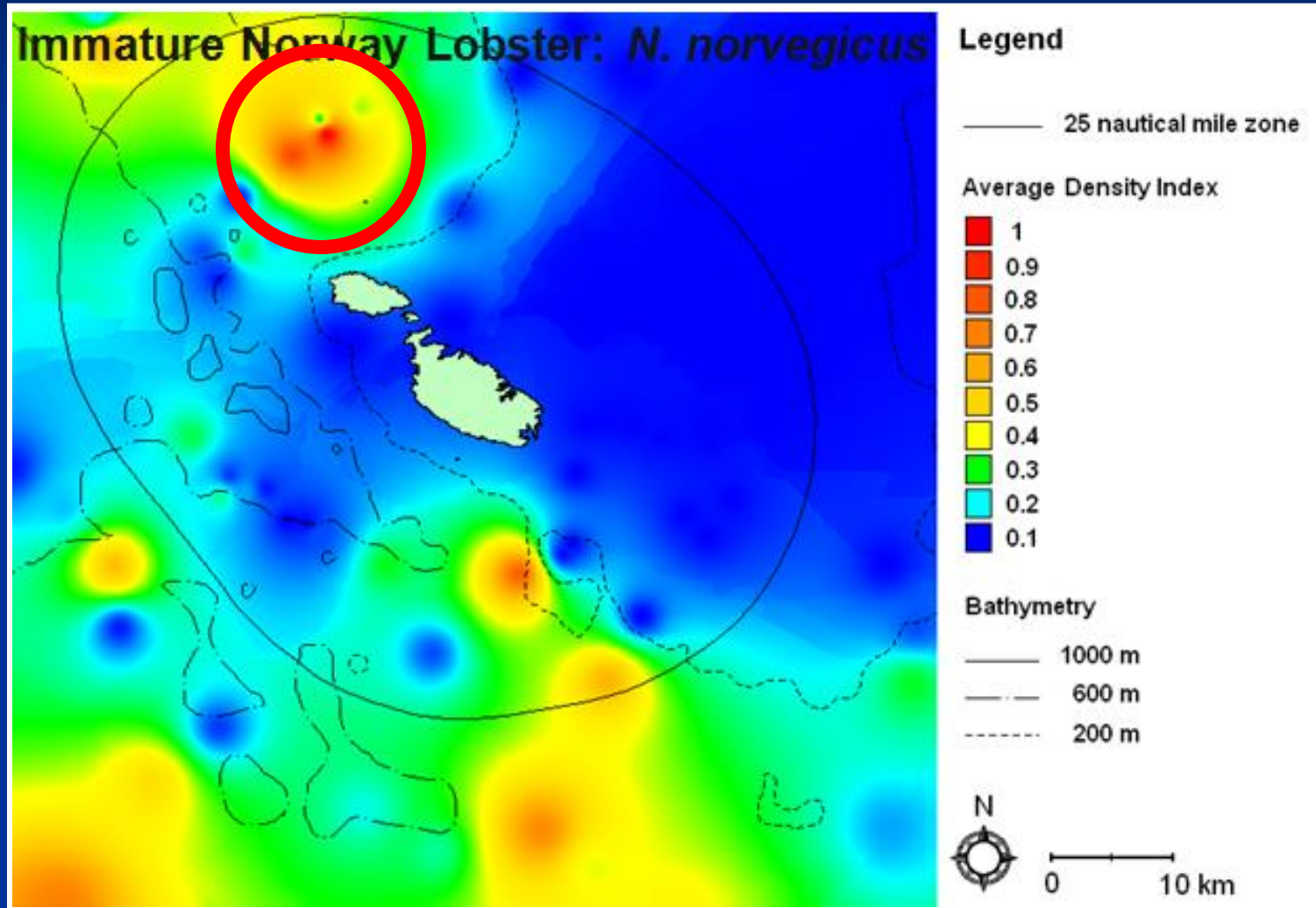
- Carried out annually in GSA 15
- Data is available since 2002
- The density and biomass indices are mapped
- Mature and immature individuals are separated based on maturity stages to identify spawning and nursery areas



# MEDITS Trawl Survey



# MEDITS Trawl Survey



# Role of Stakeholders in the Case Study

- Provision of traditional knowledge especially in the phase of data analysis
- Feedback on the data collection methodology
- Feedback on reports prior to submission



# Expected Outcomes - I

- Enhance the data available for stock assessment purposes.
- Gain insight on the **spatio-temporal distribution** of mature and immature individuals of the species under study together with the length frequency distribution.
- These results will be analysed to draft a plan for trawling zones managed by closed seasons as to promote the conservation of nursery and spawning areas.
- The results of on-board observations by MRRA staff will be compared with self-sampling by fishers to assess the potential for a **long term continuation of the project.**

# Expected Outcomes - II

It is expected that all parties involved will benefit from this collaborative project:

- **Scientists** would benefit from fishers' traditional knowledge and the easier access to samples
- **Fishers** would be directly involved in the management process as well as receiving profit from the compensation they will receive for collaborating in this project
- **MRRA** would benefit with the increased acceptance of future management plans since the fishers will be directly involved in the planning activities

Thank you for your attention!

