Recommendations on EMODnet and citizen science

Marine related citizen science has an extensive value chain: citizen and community needs, easy-carrying & use monitoring instruments, taking and sharing citizen observations, performing research and provide training and education by using the citizen data and other open data for the interests of individuals, local or wider communities. Data plays a central role in citizen science.

Companies, NGOs, local communities and individuals are increasingly aware of the importance of data in preserving their marine environment, biodiversity and reducing climate changing impacts. They make and share observations, some are supported with externally funded projects and some are based on volunteered basis.

EMODnet, as an EU open and free marine data portal may play a coordinating role for citizen marine observations. Specifically, it is recommended by the panel that following measures can be taken by EMODnet to facilitate European marine citizen science:

- Being a focal point on EU marine citizen data with dedicated support to citizen data providers and users
- Facilitating citizen data collection by
    - providing guidance on data standards
    - Improved coordination and dedicated citizen data portal and technical measures
    - Actively engaging multi-players such as private companies, local communities, NGOs, citizen science projects etc.
    - making the flow from citizen to EMODnet repositories easy to use
- Facilitating user uptake of citizen data by
    - making citizen data with interoperable format and quality standards;
    - providing users with easy-to-use data modelling tools such as time series forecasting, pattern analysis, machine learning etc.
    - performing fit-for-purpose assessment on citizen marine data, incl. e.g., designing "citizen data solutions", quality, usefulness and gaps in important challenge areas
- Being user-driven and user-oriented:
    - building up long-term engagement between EMODnet and sustainable citizen science communities
    - working closely with citizen science communities, identify user needs and improving data service with feedbacks from citizens
    - bridging citizen science and research communities, provide data harmonization scenarios for user-oriented applications