State of progress at the end of January 2014

Working group

"Ocean and Society 2030"
Updating a future major challenges facing the world of research

Background and aim of the study

There are many specialized studies about oceans, seas and marine coasts, but very few of them deal with all these dimensions together in a comprehensive and forward-looking vision of this space. The marine area is usually addressed by discipline or issue : climate change, living resources, mineral resources, biodiversity, pollution, maritime security, technological risks ... This segmentation is not suited to renew visions : the risk is great to set the Research paths in continuity which will leave on the side of the road crosscutting and innovative issues.

This is why the PROSPER Network, with the help of the Futuribles Agency and the financial support of the French research organization Ifremer, undertook a comprehensive foresight exploratory study, which aims to review all future issues linking oceans and society in the time frame of 2030. The goal is to provide the scientific community, which should help by providing answers, with key global readings, allowing it to review the adequacy of its priorities on the basis of a renewed vision of major marine challenges.

Development of a systemic foresight grid at the crossroads Ocean / Society

The first step was to build the methodological tool. Compiling main forward looking world reports (UN, OECD ...) allowed to raise a list of global development trends, which have been reported into nine large social functions (to feed, to make safe, to dwell, to heal ...). To structure the ocean side, segmentation in eleven areas of maritime activity was retained (transport and ports, tourism and water sports, cities and coastal fisheries and aquaculture ...).

The second step led to analyze systematically how global trends impacted specifically each intersection of a large social function and a field of maritime activity. The result of this work has been synthesized at two levels. At the analytical level, a summary sheet of the most significant foresight elements for each major societal function. At the synthetic level, a summary chart gives an overall view : ninety-nine cells with short wording at the intersection of the nine major societal functions (columns) and the eleven areas of maritime activity (in lines).

Structuring the foresight field into nine Grand Challenges

The third step was to identify challenges in the future, which can be considered major. To ensure the robustness of the results two different processes were conducted in parallel. At the analytical level, a systematic clustering of all the elements helped define families of questions, including almost ten recurring questions from different segments of analysis. At synthetic level, an Expert overview pointed twenty major questions emerging from the summary chart. The remarkable convergence of the two processes led to structure the forward thinking field into nine Grand Challenges of society in connection with the oceans by 2030, and to point for each Challenge two issues worth specific attention, due to their crosscutting influence.

Consultation on the perceived importance of the eighteen issues sorted

The fourth step consists of a wide survey of maritime domain professionals or scientists or society stakeholder - experts or not about marine issues - The survey is designed to gather their perceptions of the importance of eighteen future issues retained within nine Grand Challenges. The survey will be sent to around a 1000 people, including a third from abroad.

The PROSPER Network is the structure of encounter, dialogue and action for the foresight officers community of the French public research. Working both on technical and managerial levels of foresight, it develops an expertise extending from operating methods to scientific relevance and social impacts of forward looking activities.