Scenario, fishEry, ecologicAl-economic modelling and VIability nEtWork (SEAVIEW)

Call: Scenarios of Biodiversity and Ecosystem Services Lead PI: Luc Doyen, CNRS, Pessac Partners: Olivier Thebaud, IFREMER, Plouzane L. Richard Little, CSIRO, Hobart Martin Quaas, University of Kiel, Kiel Astrid Jarre, University of Cape Town, Cape Town Leo Duta, CSIRO, Dutton Park Debora Martins de Freitas, Technological Institute of Aeronautics, Santos Fabian Blanchard, IFREMER, Cayenne Claire Armstrong, University of Tromsø, Tromsø Felipe Gusmao, Federal University of Sao Paulo, Santos Sponsored by: ANR, CSIRO, DFG, FAPESP, NRF, RCN

Reconciling food supply and security with biodiversity protection is a key challenge of the century, especially in the face of population growth and climate change. The case of fisheries and marine ecosystems is especially challenging in this ecological-economic perspective.

Many marine scientists advocate an ecosystem approach to identifying sustainable scenarios and management strategies for these marine socio-ecosystems. However, the way to operationalize such an ecosystem-based fishery management (EBFM) remains challenging. Viability, co-viability or eco-viability modeling is now recognized by a growing number of researchers as a relevant framework for EBFM. In the context of dynamic ecological-economic systems, viability models both allow to assess the ecological and economic vulnerabilities of given scenarios and projections and to exhibit states and controls that sustain the safety and resilience of the socio-ecosystems.

The aim of the network SEAVIEW is to reinforce and disseminate the methodological advances of the network teams regarding viability modeling for ecosystem-based fishery and marine biodiversity scenarios and management strategies.

For this, SEAVIEW will rely on the interdisciplinary skills in economics, ecology and integrated modeling, as well as the case studies of the different partners including France (CNRS, IFREMER), Australia (CSIRO), Germany (Univ. Kiel), Norway (Univ. Tromsøe), Brazil (Univ. São Paulo and TIA) and South Africa (Univ. Cape Town).

The consortium intends to improve the ecological-economic models, methods and tools, to disseminate them broadly and to develop ambitious collaborative research endeavors that can be submitted for funding under international research programs

Specific targets of the network include the organization of NRM world conference (Natural Resource Modeling) 2015 and of a theme session at an international symposium on the integration of human dimension in integrated ocean use assessments, as well as a proposal for the Belmont call for research projects on biodiversity scenarios in 2017.