



VECTORS

Vectors of Change in Oceans and Seas Marine Life, Impact on Economic Sectors



VECTORS proposal submitted to EU FP7-OCEAN-2010

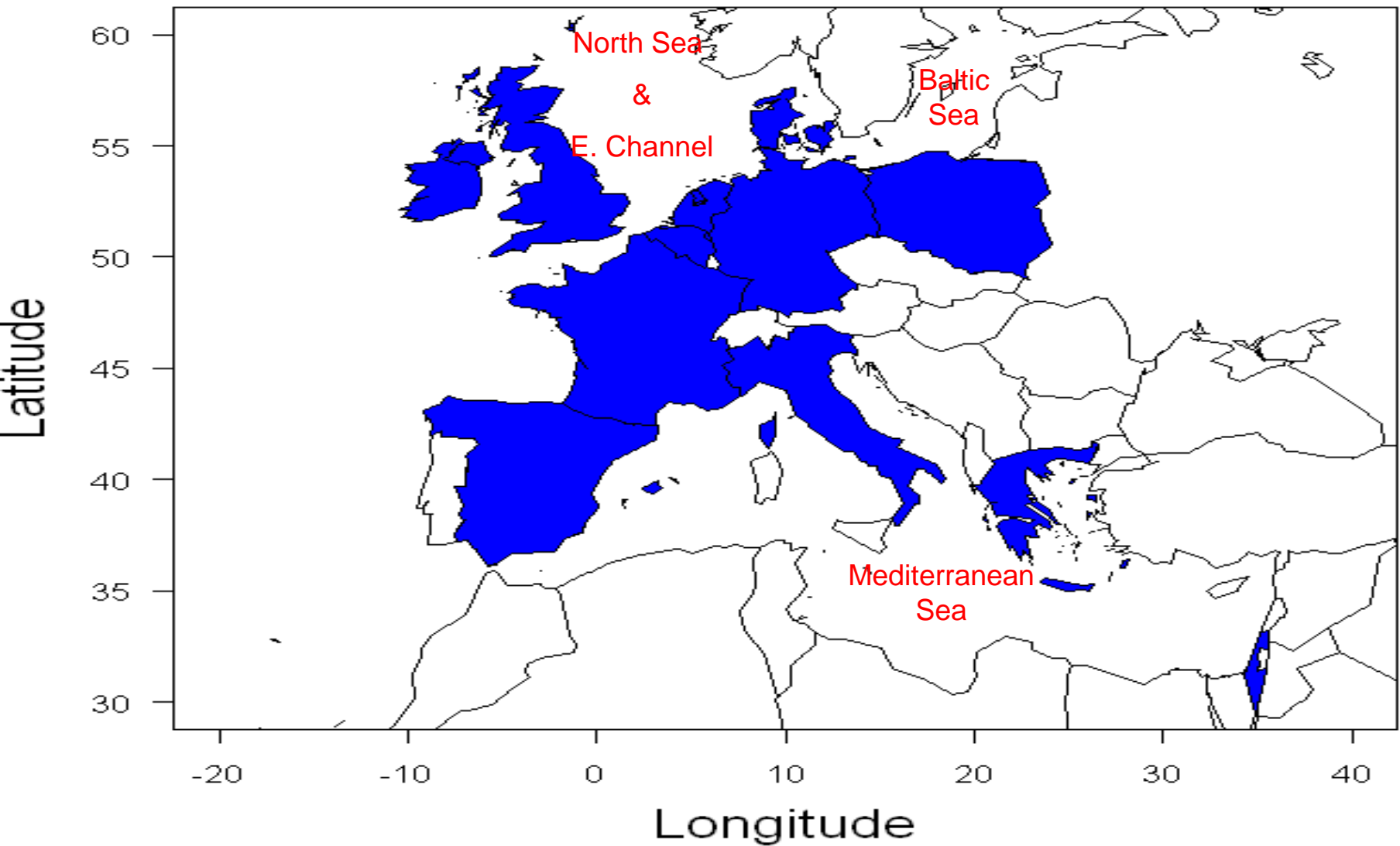
Submitted : 14 january 2010

VECTORS team & budget

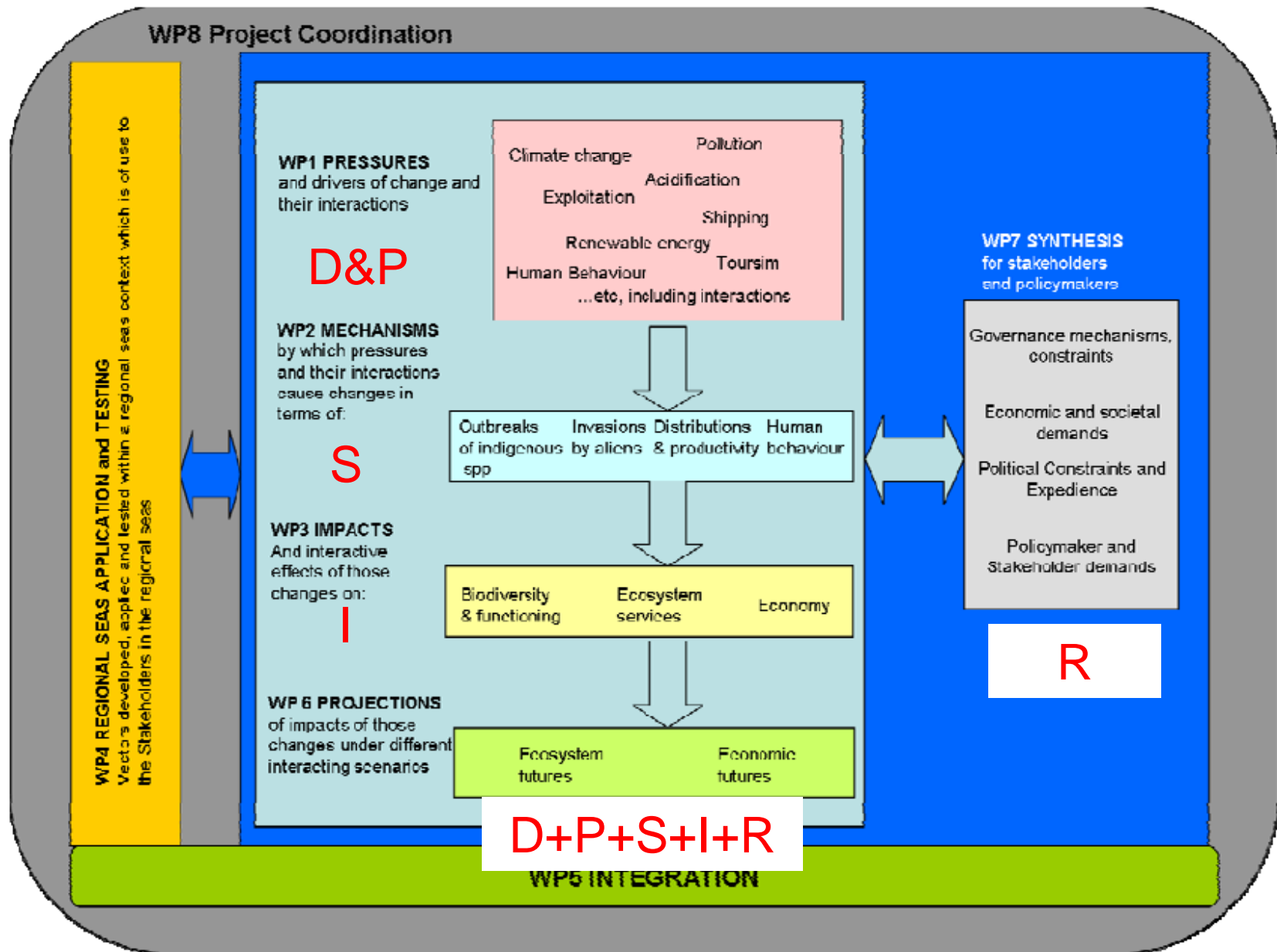
- ◆ VECTORS team
 - Coordinator: Plymouth Marine Lab
 - 37 EU partners, of which:
 - 3 French Research Institutes (IFREMER, Agrocampus-Ouest, Université de Rouen)

- ◆ VECTORS budget (2011 – 2014)
 - Overall budget: ~17 million €
 - Requested EU contribution: 12.5 million €
 - Contribution (million €) from the different EU DG:
 - 6 : Maritime and Fisheries
 - 3.5 : Transport
 - 2 : Environment
 - 1 : Energy
 - IFREMER request: 0.34 million € (3%), which pays:
 - 25 months : Permanent staff
 - 18 months : ½ PhD fellowship

VECTORS geography



VECTORS outline: DPSIR framework



Drivers & Impacts (NS & E. Channel)

	Spp outbreaks (jellyfish)	Distribution changes	Ecosystem function	Activity sectors interaction	Eco-nomics
Transport					
Discharges					
Energy (wind farms...)					
Fishing					
Aquaculture					
Aggregate extraction					
Environment change					

WP2 Mechanisms of changes

- ◆ Model for marine primary production;
- ◆ Predictive fish distribution and migration models;
- ◆ Parameterisation of trophic interactions;
- ◆ Analysis of the key determinants of human behaviour (economics, management, fish density, competition...) in a maritime domain;
- ◆ Analysis of the effects of area-based restrictions on sectors of activity interacting in a maritime domain

- ◆ Review of sectors of activity ;
- ◆ Spatially-resolved estimates of the impacts of various drivers ;
- ◆ Development of cross-sector model framework ;

- ◆ **Developing a holistic framework for assessing multiple drivers ;**
 - Investigate cross-sectoral ecosystem ATLANTIS modeling platform (CSIRO, Australia)
 - Develop mixed fisheries ISIS-Fish model to integrate habitat vulnerability and trophic interactions