Socio-economic framework of MRIs

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Headline indicators

- Social returns
- Employment
- Industrial development and innovation
- Research and education
- Recognizing, demonstrating and capturing the value of ES
- Environmental protection
- Policy support

Social returns

- Econometric studies of R&D investments show social returns to these investments at 30-50%
- For any major MRI this should be estimated using a joint model for all such investments
- Elements of this model will include present indicators

Employment

- Employment creation related to the construction phase (man-years)
- Direct employment in operating phase
- Indirect employment created in supplying industries and services
- Indirect employment in the public sector (schools, etc)

Industrial development and innovation

- Patents created
- Science based start-ups
- Entrepreneurial start-ups
- Turnover/sales from MRI related economic activities
- External funding («export»)
- Sales of MRI services to private sector
- Venture/risk capital attracted
- Public technology prodUrement contracts

Research and Education

- Overall number of research man-years in operation phase
- Yearly research budgets
- Ph.D. students, Master students, Undergraduates
- Foreign/visiting scientists
- External funding (other countries)
- Related universty staff involved
- Spin-offs into other MRIs (data bases etc)
- Advanced grants/research projects

Recognizing the socio-economic value of Ecosystem Services (1)

- Identification of the landscape of ES that are linked to the MRI actions, and respective beneficiares (stakeholders/spatial scales)
  – definition of the matrix
- Demonstrating how MRI can depend/impact the provision of ES, in economic terms (provision, regulating and cultural services)
  – population of the matrix (values)
  Assess the business risks and opportunities associated with these impacts and dependencies

Recognizing the socio-economic value of Ecosystem Services (2)

- Capturing value, introducing mechanisms, which, together with the application of the MRI actions, are able incorporate the values of ecosystems into decision making/policy support (link to governance structure)
  - Governance dimension (additional dimension to the matrix)

  Develop BES information systems, set targets, measure and value performance, minimize and mitigate BES risks, using compensation ('ES offsets') where appropriate, based on concept of Net Positive Impact, engage with business peers and other stakeholders to improve BES guidance and policy

Recognizing the socio-economic value of Ecosystem Services (3)

- Mapping the distribution of the beneficiaries and how MRI is related to the present distributional baseline (scenario analysis)
- The MRI impact to a re-allocation of ES among the beneficiaries and the respective potential support that MRI may have to vulnerable socio-economic groups (e.g. identification of potential winners and losers)
- Evaluate how socioeconomic and governance (eg, institutional processes) characteristics influence MRI success (here in terms of overall provision and distribution of ES among people).

Environmental protection

- European Regulations, Marine Protected Areas and Marine Managed Areas (MPAs, MMAs)
- Vast/large trans-boundary system MMAs, compassing both coastal areas and high seas, promoting international coordination and therefore allowing for a continuum of harmonized protection measures, agreed between the concerned countries (political goodwill/governance dividend) would improve existing relations between neighboring States, and render current disputes over the precise demarcation of maritime frontiers less and less relevant

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MPAs, MMAs: Good for Fish/Environment! Good for People?

Policy support

- Direct and indirect support to policies and ecosystem management (such as fisheries/stock management systems, MSFD)
- Cost savings in key areas
- Tangible improvements in policy knowledge bases
- More?