

**iMarine**  
 3<sup>rd</sup> Marine Board Forum  
 Brussels, 18 April 2012  
 Data e-Infrastructure Initiative for Fisheries management and Conservation of Marine Living Resources

**iMarine**  
 Hybrid Data Infrastructure for an ecosystem approach to fisheries management and the conservation of marine living resources

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**iMarine**

- Scientific communities are global, multipolar, and networked
- Data are large and maintained by international organizations
- Standards and Technologies change rapidly

**iMarine operates a hybrid data infrastructure**

- access rich data spaces
- reduce operational costs of a given application
- increase application quality of service (15-45 times faster)

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**Blue Technology**

- Generate Probability models for species (e.g. Aquamaps, Feed Forward Neural Network)
  - Perform transformations on environmental data (e.g. interpolations)
- Perform vessel trajectories analysis and monthly fishing effort calculation
  - Evaluate models, distributions and experiments (e.g. ROC curve, AUC, Accuracy)
- Perform data quality analysis (e.g. Habitat Representativeness Score)

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**Blue Technology Evolution**

**Now**

- ecological niche modelling - species capture TimeSeries harmonization - statistical data analysis with R - data mining with WEKA

**By May 2012**

- SDMX repositories access - GBIF and OBIS integrated access

**By July 2012**

- Occurrence Data reconciliation - CoL and WoRMS integrated access - Statistical engine (e.g. support vector machines, neural networks)

**By October 2012**

- Taxon Name reconciliation - Environmental service to access, process, and distribute environmental data (e.g. MyOcean)

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**Discussion time**

Thanks for your attention

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