

Roundtable 2: Design of a transnational joint observing system of systems; available technologies and tools; how to monitor the coastal domain at the ecosystem level



By: Christos Arvanitidis

SHAREMED: First Capitalization Workshop | Digital Conference | 15 December 2020

www.lifewatch.eu | ceo@lifewatch.eu

Q10. *How can we highlight the importance of national observing systems as a key component in the evolving European Ocean Observing System? Which are the key actions needed to really support national systems and build common observation strategies that fit a comprehensive cross-boundary joint effort to observe the sea at the scale of detail that we need?*

1. National observing systems are those which generate the data through which we can achieve upscaling at European and global scales.
2. Only national experts know where to go and what to measure and can adjust their efforts to the European standards.
3. By entrusting in national observing systems we have many more chances for innovation to occur at any step of the process.
4. Key-Action 1: Adjust national efforts to European and global initiatives (e.g. EuroGOOS, MSFD, Regional Conventions, Planetary Observatories, etc.)
5. Key-Action 2: Adjust national observing systems to scientific questions and not only to address the obligations of each country (e.g. MSFD).



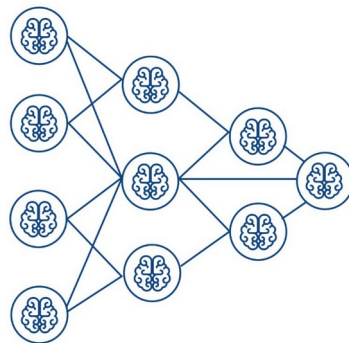
Q12. *How can we really modify the mentality of how to do observations together. We are still much working individually in our research groups, or trapped behind institution based or specific project funding targets. When we meet in conferences we are still highlighting individual achievements, but not yet geared or readily planning to share resources and experiences to really do observations together? What can make such a paradigm shift happen?*

1. Breaking barriers (or silos) towards collaborative efforts is one of the major challenges of our times for our disciplines. It's not a scientific or a technological one. It's cultural.



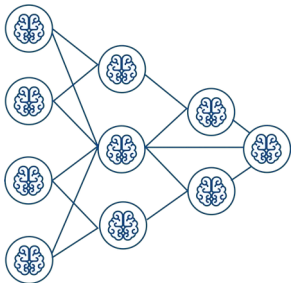
_ Cultural challenge

"This change would direct most of the scientific effort from a single-core (SCBs) operation, or **brain-etics**



to high performance brain network synthesis (HPBNs) or **brain-omics**"

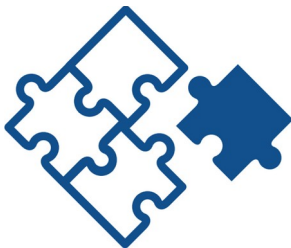




On the science side

Consilience (unity of knowledge): "Literally a 'jumping together' of knowledge by the linking of facts and fact-based theory across disciplines to create a common groundwork of explanation."

Synthetic knowledge: Looking for knowledge stemming out of evidence from as many disciplines as possible (cross-domain).



On the technology side

An environment **boosting integration, community de-fragmentation,** and **innovation** and **growth**, practically without limits.

Thank you for your attention and questions

email: ceo@lifewatch.eu

Website: www.lifewatch.eu

Twitter: [@LifeWatchERIC](https://twitter.com/LifeWatchERIC)