

# TOWARD A MEDITERRANEAN NETWORK OF OBSERVING SYSTEMS

- How can oceanographic fleets contribute to maintaining distributed observing systems?
- How can we optimise in a more cost-effective way the data gathering during a scientific cruise?
- Is it possible to optimize the use of expensive instrumentation through sharing among different teams?
- What is the best policy between research institutions and ship owners in quantifying and take into account in the contract payment possible prolonged down of a particular instrumentation or set of instruments?

- **How can oceanographic fleets contribute to maintaining distributed observing systems?**
  - With the increasing number of buoys and mooring sites and underwater stations deployed for multi-year intervals in all seas, it is important to optimise the use of ships that may happen to work in these areas even if for a totally different scientific purpose;
  - Need to bring onboard people expert in maintain the, and retrieve data from, observing systems;
  - This effort can be made at national level or at larger scale: among Countries working in the same region for different purposes.

- **How can we optimise in a more cost-effective way the data gathering during scientific cruises?**
  - having on board multiple instrumentations and versatile technicians it is possible that, for instance, during a coring cruise the night is spent to acquire multibeam bathymetry;
  - some ships do not work much during the night (not enough embarked ship personnel) and this poses the problem of how to optimise the 24h cost with a little additional cost;
  - in this view it is necessary to set simple rules and best practices on handling shared data bases among different teams?

- **Is it possible to optimize the use of expensive instrumentation through sharing among different teams?**
  - this can be done within the same fleet at national level, by sharing the same set of instrumentations among large and smaller ships (provided that some structural requirements are met in the small ships, of course);
  - sharing among different countries may be difficult; but is it impossible or is it worth trying?
  - In both cases, all instruments of some complexity are run by few “key” technicians that should travel with the instrument.

- **What is the best policy between research institutions and ship owners in quantifying and take into account in the contract payment possible prolonged down of a particular instrumentation or set of instruments?**
  - chief scientists optimise their own cruise by using different instrumentations while waiting for a replacement or fixing of a damaged instrument;
  - however, this is cost effective only on a relatively small portion of the allocated ship time;
  - prolonged downs of key instrumentation result in a cruise that cannot achieve the results for which it was funded (even if “new findings” are always guaranteed!).