Some suggestions/comments from the MedCLIVAR experience (DRAFT)

My comments aim at soliciting the reinforcement/establishment within CLIVAR of regional networks where climate change scientific issues are present in combinations with environmental and societal challenges for which response actions are of paramount importance. Those regional networks should exploit existing expertize to promote cooperation on innovative scientific projects and allow transfer of knowledge to areas/countries where they are needed.

The Mediterranean region and MedCLIVAR (www.medclivar.eu) can serve as an example of what is meant in practice and of how major results can be obtained with limited (but not nil) resources.

Networking can provide new synthesis of existing knowledge on which project proposals can be based in a positive feedback loop whose final results is dissemination and accumulation of knowledge. Schools involving young scientists, thematic workshops, general conferences and editorial initiatives are essential components of this network.

It is essential that minimal level of structural funds for ensuring these activities is provided and activities are managed by a motivated steering group. The level of structural financial support should not cover completely the expenses, but allow to programme initiative in coordination with other sponsors such as national agencies, international projects, supporting institutions, which can provide the missing resources. It is my experience that offering the possibility of co-sponsorship can efficiently attract resources.

Coordinated editorial initiatives (books, special issues, newsletter) are an efficient tools for pushing scientists to focus the outcome of their research on scientific objective that are relevant to the network.

The success of a network relies on the existence of a well-developed educational and research system in the countries participating to the network, where scientists have facilities, resources and salaries not exclusively booked by approved external project. MedCLIVAR results would not have been possible without scientists freely contributing their time to it. It is important that research and educational policies grant to scientist some freedom, so that a fraction, which does not need to be particularly large, of their time is not constrained to the specific deliverables of externally funded project (meaning project funded with resources external to their institution for the achievement of a very specific set of deliverables).

Some key components of a successful regional network

- a unifying framework (i.e. the climate processes of the Mediterranean region and environmental issues associated with them)
- a well developed research and educational framework in at least part of the region
- environmental and societal issues motivating the network
- the establishment of a set of common deliverables (e.g. books, regional assessment, research papers)
- the opportunity of a series of meetings and major events beyond the scope of specialized topics
- the identification of a set of crucial problems to be addressed
- activities to be shared in terms of tools, projects, results

What MedCLIVAR would need in order to continue its activity:

- continuous endorsement and being recognized by CLIVAR as a CLIVAR initiative

- visibility within CLIVAR
-promotion of MedCLIVAR with governmental institution and funding agencies in order to get structural funds
- some economic support

What would be the major objectives

- Improve the link between climate scientists and communities working on related impacts (hydrologists, agronomists but also experts on health, ecosystem functioning, tourism, energy production…)
- To produce projection at high resolution
- To improve information on climate extremes, the processes determining them, their representation in climate models
- To produce projections on impacts fully exploiting the results of climate model and assessing uncertainties
- To develop regional model of increasing complexity for a realistic reproduction of the regional climate system
- To achieve a seamless vision of past and future climate evolution at regional scale
- To continue exploiting regional data and merge proxies and instrumental data
- To promote regular and systematic monitoring of climate change
- To promote distribution of climate data
- Development of public datasets with observations and model results
- Disseminate information on regional climate change and its impacts