

(I) COST revisited: activities in the field of Earth System Science and Environmental Management

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Since its foundation in 1971, when the science and technology (S&T) landscape and challenges in Europe were quite different, the COST framework for supporting S&T cooperation in Europe had remained more or less unchanged. It is thus very remarkable that a new governance and structure with respect to the partitioning of the world of knowledge and science. This was adopted last year with an effective start this year in 2006. The original 17 different Domains or fields of science have been re-arranged into 9 Domains. The main incentives for such restructure was to enable better possibility to handle key emerging issues for European research, take into account the changes and new paradigms in S&T and favour interdisciplinarity.

For the meteorological and atmospheric community, the relevant domain will now be the domain “Earth System Science and Environmental Management” (or ESSEM). In particular, this new structure will thus respond to the change in paradigm observed in meteorology and climate research from atmospheric models through coupled ocean-atmospheric models to full earth system models embedding also the biosphere and human inputs.

The previous COST Domain of Meteorology was indeed a very successful forum, which for instance led to the foundation of the ECMWF, but the new structure will hopefully also enable new cutting edge advances and especially acts as a true exploratorium of new ideas in the most promising fields of science. Thus, in spite of the disappearance of the explicit name of meteorology from the list of domains, the whole meteorological and atmospheric community is stimulated to submit COST proposals with a view to enhanced nationally funded research based on synergies for the good of European science and society.

The presentation will describe the new domain, some examples of successful COST Action in atmospheric or related sciences and draw some prospect for future activities.