How the CoP concept and the ‘network of networks’ model is implemented by GEO BON

The Vision of GEO BON is for a coordinated, global network that gathers and shares information on biodiversity, provides tools for data integration and analysis, and contributes to improving environmental management and human well-being.

GEO BON is a specific example of a *community of practice* (CoP), within the Group on Earth Observations (GEO). It is the main implementation platform of the Biodiversity *Societal Benefit Area* (SBA). As such, it is a “network of networks”, a structure with minimal parts of its own, designed to help strengthen and coordinate the activities of a diverse set of partners towards a common goal—improved biodiversity information for a wide range of users. The only GEO BON standing body is its Steering Committee, consisting of both biodiversity information users and providers.

The coordination actions of GEO BON are conducted by working groups. The members of the working groups are experts, appointed on a voluntary basis and in their own capacities, selected to provide the necessary skills, experience and connections to achieve the task.

There are currently eight working groups who are each essentially a specific community of practice in their own right, and each drafted their own section for the GEO BON implementation plan. The working groups are pragmatically constituted, reflecting the way the biodiversity community is organised and interacts, rather than being an abstract logical structure. Thus, for instance, collations of observations at the species level—and especially of land-based species—are in a more advanced state than, for instance, those for freshwater species or for biodiversity-oriented observations at gene level, and are therefore separated out as a working group on their own. A continuous and active effort is made to ensure good interaction and coordination among the WGs. FYI, current working groups as follows: Working Group 1: Genetics / Phylogenetic Diversity

Working Group 2: Terrestrial Species Monitoring

Working Group 3: Terrestrial Ecosystem Change

Working Group 4: Freshwater Ecosystem Change

Working Group 5: Marine Ecosystem Change

Working Group 6: Ecosystem Services

Working Group 7: *In situ* / Remote-Sensing Integration through Modelling

Working Group 8: Data Integration and Interoperability

Since GEO BON is a network of networks, one of its major tasks is to bring together existing networks of various types. Two types of constituent networks are particularly important. A Regional BON is a network that serves the biodiversity observation needs of a group of neighbouring countries; these can form spontaneously, or with facilitation by GEO BON when there is a recognized need. It is expected that Regional BONs will often be composed largely of a network of national BONs for the countries of the region. Such participation by national governments in Regional BONs brings a great deal of observation data, systems, and expertise into play, and also helps align GEO BON implementation with GEO member countries. It may also be appropriate for national BONs to join GEO BON directly. Topical BONs are similar, but rather than being geographically defined are instead focussed on a particular set of biodiversity issues—for example, a taxonomic group, or one type of data. Note that the opportunistic and organic growth of GEO BON can lead to some overlap of BONs; this is consistent with the network of networks approach.

Current success with the CoP approach:

Despite the GEO BON implementation plan only being launched in May 2010, there has been a wonderful response and great success on a number of fronts. As a matter of fact, the excitement and willingness for regional networks, in particular, to be part of GEO BON has taken us by surprise. Currently there are a few Regional BONs in operation with a number more wanting to be part of the initiative. The working groups have been mostly successful in building good global networks and partnerships and pulling together ‘CoPs’ in their own domains. Thus far early products are not yet available through the data portal (will be soon). Specific requests by the user community have been received. For instance a request by the CBD to develop a report on the existing observation capabilities as related to the 2020 Biodiversity Indicators resulted in an international expert workshop being held and the report is currently in review.

In summary: The CoP approach is working very well for GEO BON and we have constant requests from individuals, groups, organisations and regional initiatives on how they may join or contribute to the effort.