

**UK VIEWS ON A COORDINATED APPROACH TO GLOBAL
ENVIRONMENTAL OBSERVATIONS**

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The UK welcomes the initiative on global observations from the United States, and looks forward to contributing to its development. In particular, we recognise its value in supporting the implementation of our environmental treaty obligations and in addressing aims identified in the G8 agreement on Sustainable Development, such as identification of new observations to minimise data gaps and the development of close coordination of individual global observations strategies. We believe that this initiative could play a valuable coordinating role in international efforts to carry forward the aims of the G8 while involving a much wider community. It provides a useful route for developing the implementation plan that the G8 require by Spring of 2004.

The UK is committed to the goal of improving the global observation networks. Our national activities cover the full range of atmospheric, oceanographic and terrestrial observations; in fact some records are amongst the longest in the world – for instance the 300 year records of Central England Temperature, and England and Wales Precipitation. In addition to national monitoring we support observations beyond our national boundaries through in situ observations in a number of remote locations under the WMO World Weather Watch Programme, the ARGO oceans project, and satellite programmes such as the AATSR instrument and Jason-2 mission. These projects are fulfilling a need to improve the global data necessary for scientific research and operational forecasting. Yet significant data gaps exist in some developing country networks, and we believe that it is a priority to fill these gaps. Some deficiencies in the networks can be addressed by removal of barriers to data sharing and making use of alternative measurement systems, but in many cases existing networks will need to be improved, and new ones established. The UK provides support through the WMO Voluntary Contribution Programme to assist with the improvement of networks and capability in developing countries.

Many global observation data are relevant to climate monitoring. But in its 2nd Adequacy Report of the Global Climate Observing System

(GCOS), the GCOS Secretariat concludes that there is a particular urgency for addressing the gaps in the climate network. It notes that “the global terrestrial networks remain to be fully implemented; the ocean networks lack global coverage and commitment to sustained operation; and the atmospheric networks are not operating with the required global coverage and quality.” The UK is keen to consider how best to address these deficiencies and welcomes the opportunity provided by the EO summit to develop a process that could contribute to the international response to the Second Adequacy Report, which will be considered further at the 9th COP of the UNFCCC. Models can also play an important role in the planning and optimisation of observation networks, ensuring that best value is obtained from costly investment in observation systems, and the UK will be happy to contribute to this through its considerable modelling capability.

We anticipate that co-ordination of a focused response to deficiencies in a particular network, such as GCOS, is an achievable, realistic task.

However, we consider that the proposed remit of the Ad Hoc Working Group is very broad and encompasses a large number of different observational networks. The Group faces a challenging timetable in drawing up a draft implementation plan for discussion in Spring 2004.

We are concerned whether such an ambitious task is practical. We

suggest, therefore, recognising the need stated in the draft framework for immediate action, and with a view to making progress relatively quickly, that priority areas are identified early on, and that practical plans for addressing these elements should be developed first.

In doing so it will be essential to build on the systems already in place and under development. It will be especially important in our view to engage the efforts of those agencies and bodies that have already prepared plans or are engaged in coordination activities. In particular, high-level input and engagement from the IGOS partners would be of great value. The Working Group will then be ideally placed to take on the necessary coordinating role required to assist in the analysis of existing networks, identification of priorities for action, and provision of a forum for Governments to discuss any relevant steps that they may take. The Working Group would necessarily be limited to a coordinating role as the resources for any action will lie with individual Governments, and will not be subject to management by the Group. A draft implementation plan will need to delineate a clear route for identification of initial target networks, analysis of those networks, and priorities to be addressed. A process will need to be established for obtaining expert advice required by the Group on any technical aspects such as barriers to data sharing, opportunities for multi-operability of instrumentation, priorities for the

design of observation networks, development of data assimilation schemes and models, linkages with implementation plans and activities within “building block” networks, and justifications for new activities. Within Europe we are already working on many of these issues within the Global Monitoring for Environment and Security initiative (GMES), which we expect will be a major component of the global observing capability. A forum for discussion of the regional and individual national plans for observations will enable coordination of effort to improve the networks, and should also be defined as part of the draft implementation plan.

The case for observations is clear. They are plainly needed for monitoring the environment in general and assessing climate change in particular. A wide-reaching consensus confirms human-induced changes to the global climate, even though there are regional gaps. Climate models are required to provide projections of climate change and such models continue to be improved to more exacting standards. In this context improved data are essential for validating and evaluating the results of these models as well as providing a baseline for assessing the human influence on climate change to date. However, some have emphasised uncertainty and concluded that we should delay action until observations or models are improved. We believe this to be a mistaken assessment of the situation. In

our view we have enough knowledge to warrant urgent action to tackle climate change now. Without concerted action to reduce greenhouse gas emissions, global temperatures will continue to rise and the risks of significant and irreversible damage due to climate change will increase substantially. To stabilise greenhouse gas concentrations in the atmosphere at a level which avoids dangerous anthropogenic change requires significant reductions in global emissions. Further observations will help us frame the details of the problem and better define the actions needed but the above assessment is unlikely to be changed. We welcome this initiative but we also urge action on this wider front to address climate change.