

## WEDNESDAY 10 DECEMBER 2003: PAYING FOR METEOROLOGY

[Prof Paul Hardaker](#) CMet , Met Office: **Paying for operational meteorological services**

Most national meteorological services depend on revenue from paying customers in order to deliver their obligations as a provider of essential meteorological data, forecasts, warnings and related research. In many countries there is an active private weather service industry. The model that these public and private sector bodies operate under and their interdependence varies from country to country.

The economic pressures on all national meteorological and private sector weather service providers are mounting. Public sector grants are reducing in real terms as governments prioritise their spending elsewhere whilst costs rise in real terms. Meteorological data and information is becoming more and more widely available over the Internet at nil or negligible cost and customers are demanding more for less.

This presentation will set the scene for the afternoon discussion meeting, exploring the current business models operating internationally, looking at the UK model in particular. It will also consider the sustainability of current models, the value they deliver to the economy, customer and consumer and offer thoughts on future trends.

[Dr Kerry Emanuel](#), Massachusetts Institute of Technology: **Environmental data policy in the U.S**

Although there is no official government policy on environmental data in the United States, the actual practice of the collection and dissemination of environmental data has evolved within each of several federal and state agencies toward a common goal. As the benefits of the free and open distribution of environmental data became increasingly evident, and as contemporary communication evolved to allow the rapid transmission of large volumes of data, the benefits of a global public policy on environmental data led the American Meteorological Society to formulate a Statement on environmental data as a "public good" (a non-depletable and often non-excludable product or service made freely available to the global community and regarded as beneficial or potentially beneficial to some or all members of the global public). The Statement and the debates that led up to its publication will be reviewed.

[Dr Ralph Rayner](#), Fugro, GEOS: **Achieving optimal value from publicly funded information**

This talk examines the widely differing policies of the United Kingdom and the United States that govern the availability and pricing of information obtained using public funds. It particularly considers the treatment of meteorological and oceanographic information resources.

Following an analysis of the revenue generated through sales of UK publicly funded meteorological and oceanographic information it then considers the impact of present UK policy on the take up and secondary use of publicly funded marine information for commercial purposes.

The talk concludes with some recommendations for improvements to present access

regimes and a summary of the implications of restricting access and discriminating against secondary commercial use.

[Dr Mary Altalo](#), Science Applications International Corporation: **Deriving "business solutions" from weather information: the critical process for meeting private sector demand**

Weather increasingly is the tipping point between efficient, cost-effective business operations and costly, reactive and unsafe management. The presentation will show how weather forecast information is used as one input to multi-parameter business forecast models, the output of which triggers a series of business decisions, actions, and outcomes to which a monetary value can be ascribed. Case studies examine the optimal weather variables that “ feed” the decision support tools and demonstrate how an environmental forecast is changed into a business forecast. Incorporation of probabilistic weather/climate forecasts into business models is a major issue challenging the private sector at present and new business indicators, such as the “Triple Bottom Line” of profit, environment and social concerns, are being factored into the performance metrics of companies. These “sustainability” drivers are increasing the “demand-pull” for environmental forecast information. Partnerships between the business “users” and the information “providers” are raising the awareness of the private sector as to the value of environmental information enabling them to hedge risk with information as well as derivatives.

[Professor Alan J Thorpe](#), NERC Centres for Atmospheric Science, Reading: **UK research in atmospheric science: structure, strategy and funding**

Research in atmospheric science in the UK is funded by many sources but probably the largest are the Natural Environment Research Council (NERC) and the (customers of the) Met Office. UK research in many sub-disciplines is world-class and in some cases it is world leading. The sub-disciplines making up the atmospheric and related sciences undergo evolution as research priorities, including those of funders and operational services, change. The talk will include a perspective and outlook on funding of academic research, including that associated with the NERC Centres for Atmospheric Science. The collaboration that has grown up over many years between researchers in the academic sector and in the Met Office will be discussed and suggestions will be made for the most effective way to carry this forward in the light of the threats, opportunities, strengths and weaknesses that exist for the UK research community.