

Guest Editorial

Science versus politics in judging Consultative Status

In one way or another science has always been at the heart of human interest in Antarctica. Since 1961 its centrality has been enshrined in Article II of the Antarctic Treaty, and has been reiterated time and time again at Treaty meetings. To become a full or *Consultative* Party to the Treaty a country must “*demonstrate(s) its interest in Antarctica by conducting substantial scientific research activity there*” (from paragraph 2 of Article IX of the Treaty). In the early days a nation simply established a scientific station to meet this criteria, but more recently the Consultative Parties have decided that a station was not a pre-condition for attaining Consultative status and have put emphasis on science track record and intentions instead.

So how, in practice, does a candidate nation achieve consultative status? It declares its intentions at a Treaty meeting and provides a statement of its scientific programme and publications. The Parties consider if this is a “substantial” programme and comment back to the applicant. As the word “substantial” is not defined this is necessarily a subjective process in which politics almost certainly plays a larger part than science. Nevertheless, there is a process at least for judging science quality for elevation to Consultative status.

But what about judging, reviewing or monitoring the quality of science output by Consultative Parties? There are apparently no procedures within the ATS, formal or informal, to assess output. Paragraph 2 of Article IX of the Treaty, starts: “*Each contracting Party . . . shall be entitled to appoint representatives to participate in meetings . . . during such times as that Party demonstrates . . . substantial scientific research activity.*” implying that, in principle at least, a Party could be invited not to participate in an ATCM if it could not continue to demonstrate substance in its scientific work. Of course this has never happened, but it does raise the issue of whether the Treaty Parties collectively give sufficient priority to maintaining international scientific credibility by ensuring that all Parties are conducting “substantial” scientific programmes. How could they do this?

Some nations do report on scientific plans and outcomes through “Information Papers” at ATCMs, but these are almost never discussed in any critical way. Often they are not discussed at all and this may, in part be attributable to the limited scientific expertise available to question the information presented. Some Parties also subject their programmes to international peer review, but only one country, Finland, has so far reported (at New Delhi in 2007) the outcome of such a review to a Treaty meeting. The ATS did make one tentative step towards critical evaluation when, at the Stockholm ATCM, SCAR was invited to carry out an *in situ* scientific audit of research stations. SCAR wisely decided that this was not a feasible task for a science NGO but an earlier editorial has already pointed out (*Antarctic Science*, **19**, 145, 2007) there are now bibliographic databases and tools which would facilitate comparisons of national programmes.

The IPY will focus a spotlight on Antarctic science in the next few years, highlighting any inadequacies in science quality. At the next ATCM Treaty Parties could consider how to address questions of science quality, relevance and importance in national programmes. They could, for example, decide to urge all National Programmes to undertake and publish regular international peer reviews. They could also ask the Antarctic Treaty Secretariat to commission regular independent bibliometric analyses to inform more critical debates at ATCMs on relative science quality. It is, of course, politically unlikely that the implied sanction in Article IX of the Antarctic Treaty would ever be invoked as a result, but there would be a real incentive nevertheless for some nations to raise their scientific game.

J.R. DUDENEY

Message from the Editors

The standards of any peer reviewed journal rest on three pillars - the interest and importance of the submissions, the value and efforts of the reviewers and the quality of the editing. Antarctic Science has been fortunate over the past 19 years to build up a wide range of enthusiastic and critical reviewers, many of whom are also regular contributors to the journal.

The Editors would like to thank all those who undertook the important and time consuming task of reviewing papers for us during this last year. Your efforts are greatly appreciated. We see reviewing as a community task where all active scientists should be as ready to take part as they are to submit papers for review. It is on such a basis of corporate interest and responsibility that we can all contribute to maintaining the independence and quality of the science published.

Since moving to electronic submission and management of manuscripts the number of papers submitted has increased. As one approach to managing this and reducing delays in publication the journal moved in 2007 to immediate on-line publication of papers once accepted and edited, and the printed version will now appear on a bimonthly basis.

D.W.H. WALTON
M.R. VAN DEN BROEKE
A.P.M. VAUGHAN

Michiel van den Broeke is retiring at the end of 2007 as Physical Sciences Editor. His efforts to increase the submissions of relevant and interesting papers from climatology to glaciology have been greatly appreciated, as has his vigorous approach to scientific quality. On behalf of Alan and myself, and the Antarctic community at large I want to thank him for all his work in support of the journal.

The new Physical Sciences Editor will be Christina Hulbe, a glaciologist from Portland State University, USA, whose principal research is on the dynamics of iceflow.

D.W.H. WALTON