

FASTS FORUM ON THE RIGHTS AND RESPONSIBILITIES OF SCIENTISTS

**Old Parliament House
22nd February, 2008**

Scope

The Minister for Innovation, Industry, Science and Research, Senator Kim Carr, has initiated a dialogue with scientific community on a charter of rights and responsibilities for scientists in public research agencies. A primary aim of the charters is to ensure that scientists are able to speak out independently on issues of public interest that fall within their area of expertise.

FASTS welcomes this dialogue, and initiated a discussion forum in Old Parliament House on February 22nd, 2008 at which Senator Carr was a keynote speaker.

This document summarises some general principles that FASTS has developed which arose from discussions at the forum. While the dialogue is still continuing, much progress has been made towards informing the charters that will guide scientists and administrators working in public research agencies. These agencies will include (within the Minister's portfolio):

- AIMS
- ANSTO
- CSIRO

However, FASTS also believes that the charters could also be adapted to provide guidance for scientists who conduct research:

- funded by the ARC, NHMRC and other government agencies
- in DSTO and other defence-related organisations
- in Cooperative Research Centres
- in Rural R&D corporations
- in State/Territory Government research agencies
- in universities

and indeed even in private sector research. In suggesting this, FASTS recognises that over this range of organisational missions, there will be a spectrum of levels of confidentiality and security that will inform the scope of the charters in each instance.

Rights and Responsibilities

Every right is accompanied by an implicit responsibility to exercise that right appropriately. Indeed, the onus can perhaps be expressed more strongly: if a scientist or scientific organisation has a right to speak¹ freely in their area of expertise, then there is an accompanying *obligation* to do so as part of the virtuous cycle.

This implies that scientists can breach their responsibility by omission i.e. that they should be obliged to speak out in situations where, for example, the presentation of misinformation needs to be balanced by the truth.

Obligations on scientists could include:

- providing scientific knowledge and evidence in a form which can be usefully applied and widely understood
- contributing to public debate on issues which scientific knowledge underpins
- ensuring that others are not misled about the current state of the science
- educating themselves in the best ways to disseminate scientific knowledge
- ensuring that their organization or their stakeholders are given a “heads up” on their forthcoming public commentary when time permits.

The charters of rights and responsibilities will represent a pact between Government and scientists in public research agencies. Therefore FASTS maintains that there is a complementary set of obligations on Government, which could include:

- fostering an atmosphere and environment that stimulates open discussion
- disseminating the scientific knowledge and evidence that underpins major decisions
- providing the resources to educate young people with the skills needed to communicate scientific knowledge
- being open to scientific findings which may change current understanding, and conversely, to seek and recognise the current consensus of scientific thought.

This represents an extension of the need – often expressed in the public service context - to encourage the provision of frank and fearless advice.

Reciprocity of rights and responsibilities

The symmetry between rights and obligations depends both upon the context and upon the size of the audience. While every scientist should have the right to freedom of speech, it is not clear that *every* scientist should be obliged to speak out in *every* situation.

¹ Throughout this document, speak and speech should be interpreted generally as meaning both the spoken and written word.

At some level – and certainly at the institutional level – there is an absolute obligation for the scientific communication of research outcomes within the constraints of commercial and national security commitments. This is one way of closing the virtuous cycle.

However, it should be recognised that not every scientist – even if trained – is capable of effectively articulating science to the wider community. Some are better or more experienced at doing this than others. It is these people who should be empowered to contribute to the wider dissemination of the science produced by themselves and by their colleagues. Particularly when the audience is very broad e.g. in dealing with the media, briefings to government or in public debates in large forums, it is important for the most articulate of the knowledgeable spokespersons in a research group or institution to be chosen.

However, in the context of smaller audiences, the obligation on scientists to contribute to community discussion may flow down to the individual level. When scientists engage with small informal gatherings, e.g. at dinner parties or with school groups, it can be argued that in such circumstances there is an obligation on *every* scientist to contribute to scientific discussion, particularly if it is to correct scientific misconceptions amongst their audiences.

When should a scientist contribute?

The context is also important when determining whether a scientist should contribute to public discussion. This context relates to whether the issue on which the scientist is speaking is within their area of expertise, and again this depends upon the scale of the communication process.

As a general rule, the wider the audience, the greater the level of authority and expertise required to contribute to the discussion. When addressing the media, larger audiences or in high level public debates, scientists are generally speaking on behalf of their institution or of the wider profession in their discipline. World leading expertise should be the aspirational goal for such scientific contributions. These people should be capable of using scientific evidence to expertly support the statements being presented.

However, at the level of personal interactions, such as in the dinner party scenario, expertise can be interpreted more widely. For example, a theoretical physicist working in cosmology may be sufficiently well read or informed by presentations from their colleagues that they may be able to comment meaningfully when engaged in scientific discussion on the application of nuclear energy. Again, this is particularly the case if the scientist is able to correct simple errors of fact or interpretation.

In some cases, scholarship can confer expertise – in others, a research track record in the discipline is the mark of an expert. Scientists with research expertise in a particular sub-discipline may also possess scholarship expertise in another sub-discipline, and may be qualified to speak expertly on the latter sub-discipline in some forums.

What constitutes speaking on policy?

It is well recognised that while speaking out in areas of scientific expertise should be encouraged, public commentary on government policy by employees of Government organizations is inappropriate. However, the boundary between speaking on scientific matters and advocacy relating to Government policy is not always clear.

For example, it is entirely appropriate for a scientist to list a range of options for scientific solutions to a particular problem. Equally it is clear that if one of the range of options is chosen as Government policy, it is inappropriate for a scientist in a public research agency to comment on whether such decision is right or wrong.

However, it *may* be appropriate for a scientist to detail the implications of each policy option based on scientific arguments, while leaving it to the audience to decide which of the implications are desirable or otherwise.

Alternatively, if there are no alternative options articulated or available, and a scientist presents the implications of a single Government policy without any commentary on the desirability of such implications, then such a contribution may also be appropriate.

Rewarding desirable behaviour

Finally, although charters may provide indications of desirable behaviour, they are made more effective by reward systems that encourage such behaviour. This may require auditing the organization's enactment of the charter to ensure cultural adoption.

While censure is one way of ensuring that the charter is enforced, rewarding organisations whose scientists contribute responsibly to the virtuous cycle may be another means of creating a favourable environment, in which frank and fearless debate on scientific issues is promoted for the benefit of the wider community.