LETTER TO THE EDITOR

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Response to article by S. Cooper, "Wind farm noise - an ethical dilemma for the Australian Acoustical Society?", *Acoustics Australia* **40**(2), 139-142 (2012)

I wish to respond to Mr Steven Cooper's technical note "*Wind farm noise – An ethical dilemma for the Australian Acoustical Society*?" published in Acoustics Australia, Vol. 40, No. 2 (2012).

The author in his opening paragraph refers to a series of papers and technical notes published in the April 2012 edition of Acoustics Australia, Vol. 40, No. 1 (2012). He refers to some of those articles "supporting wind farms" and is critical that they do not "discuss the acoustic impact of the wind farms".

Firstly, in reading the articles referred to, I am unable to find any that are "supporting wind farms". The articles are technical papers describing various aspects of wind farm noise, some of which document the relevant authors' findings in respect of their work relating to the measurement of noise at wind farm sites or a review of work by others. My own paper in that series of articles, for example, is simply a summary of wind farm noise sources and noise propagation algorithms. There is no evidence put forward by Mr Cooper that the authors of those articles are associated in some way with wind farm operators. Some may have a proper business relationship as client and consultant (as referred to in clause 4 of the AAS Code of Ethics appended to by Mr Cooper's technical note), however this does not of itself make the authors of those articles persons who are "supporting wind farms".

My understanding of the AAS Code of Ethics (in clause 1) is that members of the AAS must act independently and without bias one way or the other. Just because some of the authors of the articles referred to above have clients who are wind farm operators does not make them supportive of the industry or biased. I am aware that Mr Cooper has many clients in NSW who are in the hotel industry and gives evidence in the NSW Land & Environment Court as an impartial expert. This does not make Mr Cooper a person who supports hotels or is biased toward hotel development.

Secondly, in Mr Cooper's opening paragraph he states that "the articles did not identify the basis of the criteria or the acoustic impact of wind farms even when they complied with the nominated criteria". A discussion then follows regarding how aircraft noise impacts are addressed in Australia, in my opinion meandering from the main point.

Nevertheless, the main point I believe Mr Cooper is trying to make is that, according to him, there is no connection between the criteria that is adopted in environmental noise impact studies and the affectation (including health impacts) of people who live in close proximity to wind turbines.

The first thing that can be said is that members of AAS who are contracted by clients to prepare environmental noise impact assessments of wind farms (at least in the state of NSW where I practice) must do so in accordance with the NSW Director General's Requirements. The Director General determines how the EIS should be prepared and what standards should be followed. There may be similar requirements in the other States. The Director General has already made a decision about what standards are to be applied taking into account the interests of the local community and the interests of the wider community, noise impacts, economic opportunities and so on. Therefore, if the Director General's Requirements, for example, state that the South Australian Wind Farm Guidelines is the relevant standard to be applied in respect of the project, this must be complied with.

If a member of the AAS has serious concerns about any directions given by the Director General then the appropriate forum for that discussion is a formal objection to the proposal. The fact that one member of the AAS has prepared an EIS in accordance with the Director Generals' Requirements and another member of the AAS is opposed to that standard being applied does not make the former member a person who is "supporting wind farms". In other words, just because a member of the AAS contracts to the wind farm industry does not make that member someone who "supports" the wind farm industry. Furthermore, just because a member of the AAS follows directions given by the Director General does not put that member in conflict with the AAS Code of Ethics notwithstanding that Mr Cooper may disagree with the content of the South Australian Wind Farm Guidelines or any other wind farm guideline for that matter.

The second thing that can be said about the "*connection*" issue raised above is that there is in fact technical literature which Mr Cooper may not be aware of relating to noise dose-response studies, one conducted in Sweden and one in the Netherlands (see [1, 2]).

On page 140 of Mr Cooper's technical note, he refers to "*anti-wind farm' and 'pro-wind farm' acousticians who are Members of the Society*". I sincerely hope that there is no such dichotomisation in the AAS, that we are all professionals and work without bias as to whether or not a wind farm is constructed. It would then follow that there cannot be any "*dilemma*" for any member to abide by the Code of Ethics and to sincerely and honestly, and for technical reasons alone, support or oppose the construction of any particular wind farm project.

On the 4th December 2012, Mr Cooper was interviewed by Alan Jones on the Sydney radio station 2GB wherein Mr Jones made the following statements (to which Mr Cooper did not disagree):

• Wind farm noise impact studies don't assess the noise to tell you what the impact will be;

- There is a lack of scientific evidence to prove wind farms do not create health impacts;
- There is no scientific evidence of health studies;
- The appropriate scientific studies have not been undertaken;
- The precautionary principle says we should stop building wind farms;
- We are making this up as we go along;
- The World Health Organisation noise limits apply to the city and are entirely inappropriate for rural areas;
- Wind farm operators should guarantee there are no adverse noise effects, no adverse health effects, no offensive noise and no sleep disturbance.

I certainly don't agree with Alan Jones's assessment as summarised above and I hold that view for technical reasons not for emotive ones.

In conclusion, it is a serious concern to me that Mr Cooper thinks that members of the AAS can be labelled as "pro" or "anti" anything. Members should have a technical opinion based on technical reasons for supporting or opposing a particular development. Furthermore, just because they may oppose a particular development, that should not then make them opposed to all like developments because, as we all know, every case depends on its merits. In addition, the fact that members oppose a particular development should not then brand them as "*pro*" or "*anti*".

Yours faithfully,

Dr Renzo Tonin, FAAS

REFERENCES

- E. Pedersen and K. Persson Waye, "Perception and annoyance due to wind turbine noise – a dose-response relationship", *Journal of the Acoustical Society of America* 116(6), 3460-3470 (2004)
- [2] E. Pedersen, F. van den Berg, R. Bakker and J. Bouma, "Response to noise from modern wind farms in The Netherlands *Journal of the Acoustical Society of America* **126**(2), 634-643 (2009)