Comment on Draft Standard Setting and Laboratory Accreditation

As with any other product, standards reflect the quality of their inputs and the quality of their developers. Better quality standards are developed with sound knowledge of the field and the current concerns of those fields, and the expertise of those who are knowledgeable and active in those fields. It also helps to engage those who are knowledgeable in the processes of standardisation itself, but the larger contribution depends on knowledge and expertise.

More of advancing and ubiquitous fields that affect our society such as nanotechnology, safety critical systems, organizational governance and information technology are finding that the field needs to develop standards in order to ensure that social benefits can be gained without undue social risks. In such technically advanced fields, those domain experts who are developing the standards really need to be on top of their game.

Standards on the more advanced technical areas need empirical evidence. Too often standards based on domain expertise alone have not served us well. Instead they have imposed inefficient, counter-productive or even damaging practices on the society. While standards are required to be reviewed periodically, and this provides a mechanism to correct imperfections in the standards, too often it is too late. The damage has been done or the damage, while it may be significant, is insufficient to overcome the economic cost of change. Much of this can be avoided when those developing standards have access to current empirical data of an academic peer review quality. Similarly, the participation by active research academics aids the standards development process though their skills in empirical research and critical analysis on top of their domain expertise.

The past model of standards development has assumed that domain experts and those best placed to develop standards are advanced in their careers, sufficient to have time available to engage in some community project. Importantly the model also assumes some element of good citizenry by organizations, willing to donate the time of their employees to an activity that does not directly benefit them alone. Both assumptions are under challenge as organizations, including and especially Universities, confront the need to be more productive. In Universities this results in staff effort being directed at the research quantum. Commercial organizations rarely find sufficient direct or indirect benefit to offset the costs of having their staff engaged in standards development. Consultants, who are more able to decide for themselves and who may have some stake in the standard, must sacrifice income for possible future gain. The economic and social imperatives do not encourage participation in civic activities, such as standards development, to the same extent as they may have done in the past.

To encourage more active academics to engage in standards development would require that their workload calculation acknowledged for their efforts in such activities as standards development. In turn, this could be achieved if standards development activities were eligible to be considered as part of the research quantum. Not all standards development projects, and not all standards development activities could be considered as part of the research quantum, but much of it can. Unfortunately there are no guidelines about what is or is not able to be considered. The only test an academic could apply is to apply for one or other of the ARC grants.

Guidelines are needed so that University administrations and academics themselves can know whether and what type of standards development activity is considered to contribute to the research quantum. If such guidelines can be developed and published, it will lead to a greater willingness of academics to spend some of their valuable time engaged in standards development; reviewing drafts, performing a literature search to establish the current state of the field, supervising research directed at establishing the current state of practice or engaged in action research to test the effectiveness of the proposed standard amongst other things.

Encouraging greater participation by research-oriented academics will enhance the quality and rigour of standards developed in Australia and by Australians.