

The University of Newcastle

Comments on the National Enabling Technologies Strategy Discussion Paper

The University of Newcastle sees the need to continue research in these areas in order to keep up with the evolving technologies as a key issue. The rate of at which these, and other enabling technologies are evolving makes it very important that Australia continues to participate in the development and exploration of new applications. The National Strategy must address the question of how to support on-going research and evaluation in these areas.

The Discussion Paper refers to nanotechnology and biotechnology as areas which “have moved well beyond the research phase and are beginning to demonstrate, or have demonstrated, their credentials as enabling technologies” The implied suggestion that these technologies require no further research is perverse – the fact that they have become accepted as enabling technologies is the strongest possible argument to continue and expand research in these areas, to ensure that in this very rapidly evolving area, Australia’s technological capacity continues to develop and keep pace with the rest of the world.

In a knowledge-based economy, research providers play an essential role in producing and disseminating technological innovation. The “entrepreneurial university” which regards economic development as the third strand of its core activities along with research and teaching and learning is now an accepted model in the US and Europe. Australian universities are well-advanced on the same journey, and their contribution must be recognised and acknowledge in the National Strategy.

In terms of public awareness and acceptance of these new technologies, Universities and other public research institutions are well-respected and trusted by the wider community. Because they are seen as impartial, with no vested interest in promoting one technology over another, they are well placed to undertake assessment of risks and to identify areas where regulation is required to minimise health or environmental risks. They also possess the expertise to undertake research into the social and economic impact of new technologies.

The University of Newcastle has research interests in both nanotechnology and biotechnology, through its Priority Research Centre for Organic Electronics (<http://livesite.newcastle.edu.au/coe>) and its ARC Centre of Excellence in Biotechnology and Development (<http://www.newcastle.edu.au/centre/cbd/>). The University is exploring new applications for these technologies and would of course welcome the prospect of funding to assist in this research. The University would also be very interested in working with the Enabling Technologies Policy and Public Awareness Sections to assess the technologies and assist in identifying issues which may require regulation.