

Response to the National Enabling Technologies Strategy – Discussion Paper

Over the last several years, researchers with the Public Engagement and Nanotechnology Project at Griffith University have undertaken a systematic review of public engagement activities related to nanotechnologies in Australia. As an outcome of our evaluation and ongoing review of international scholarship in community engagement and ‘nano-engagement’, we have identified six components that are vital to ensure the effectiveness of public engagement. Disappointingly, these components are frequently absent from public engagement exercises in Australia, including this most recent consultation process related to the National Enabling Technologies Strategy.

We offer our response to the ‘National Enabling Technologies Strategy’ Discussion Paper by reflecting on our six criteria for effective public engagement.

Criteria for Effective Public Engagement/Consultation:

1. Engagement activities should be open and inclusive of a range of interests and perspectives (including scientific and non-scientific disciplines), and build on the foundation of high levels of community awareness and nanoliteracy.

- While the Federal Government has provided a clearly stated commitment to open and transparent decision making-processes that engage stakeholders (see *Approach to the Responsible Management of Nanotechnology*, 2008) related to the development of nanotechnologies, it has not honoured this commitment. The decision to disband the National Nanotechnology Strategy (NNS) and formulate the National Enabling Technologies Strategy has occurred without widely engaging stakeholders – including those identified and included in previous engagement exercises undertaken by the Australian Office for Nanotechnology. As a result, it is unclear how and on what basis transition from the NNS to the National Enabling Technologies Strategy has occurred.
- There is no evidence that insights from the NNS, including the ‘Social Inclusion and Engagement Workshop’ in December 2008 have informed the development of the “Powering Ideas” Innovation Agenda and development of the National Enabling Technologies Strategy. This is completely inappropriate, both because of the commitment the Federal Government has made to public engagement, as well as the highly controversial nature of both biotechnology and nanotechnology. The forty-five participants at the workshop convened by the Australian Office of Nanotechnology were assured that they were contributing to the first phase of a stakeholder engagement plan that would be open, transparent, inclusive and flexible. It now appears they participated in a process which has been entirely supplanted by this new consultation, that their input has been ignored and that nano-engagement will not live up to the promised principles.
- A non-inclusive group of stakeholders have been invited to contribute submissions to the current engagement process. Indeed, the Public Engagement and Nanotechnology Project at Griffith University has been actively involved in nano-engagement debates for a number of years, has maintained regular contact with the AON, and yet did not receive the original email invitation to comment on the Strategy Discussion Paper. Similarly, there is no clarity related to the rationale for inclusion of participants in the forums to be held as part of this engagement process.
- Stakeholders have been offered only a short timeframe to respond to the National Enabling Technologies Strategy, stakeholders participating in forums as part of the Strategy review process have not been provided with specific information (including content and details of other participants, as well as intended outcomes and their links to policy processes). Neither were participants informed that forums are being held in two locations; Sydney and Melbourne.
- The three “key principles for public awareness and community engagement” listed in the Discussion paper are limited in their scope, and inconsistent with international best practice in the field of public engagement. Similarly, there is no indication of where these principles were derived.

2. Public engagement activities should occur upstream, while trajectories for the development of nanotechnologies remain negotiable. Upstream engagement will provide forums for diverse and critical debates, generating more appropriate policy outcomes.

- The National Enabling Technologies Strategy appears to already commit Australia to a bio/nano future. In this context, public engagement will at best be limited to responding to enabling

technology trajectories, rather than playing a key role in shaping Australia's Innovation Agenda. This stands counter to the Minister's pledge: "The Government will continue to work hard to facilitate this dialogue between researchers, industry and the general public ... We must foster informed community debate" (*Nanotechnology and Social Inclusion Report*, 2009).

- There are a number of sweeping and emotional claims in "Powering Ideas" that are not backed by scientific evidence, for example: "These technologies will help us conquer hunger and disease, carbon dependence and climate change (*Powering Ideas*, 2009, p. 56). Such statements demonstrate the extent to which the Australian Government is already committed to a biotechnology and nanotechnology future, even without rigorous and sound science to back such claims.
- In contrast to claims made by the Australian government, it is likely that biotechnology and nanotechnology will exacerbate hunger and food insecurity. For example, "enabling technologies" "allow fuel crops to be grown in marginal areas", thereby supporting the on-going expansion of the bio-fuels industry. It must be noted that up to 30 % of the increase in food prices (up 83% between 2006 – 2008) can be directly attributed to the expanding bio-fuels industry (International Trade Union Confederation, 2009). In short, support for expansion of the global bio-fuels industry is set to increase food prices, thereby further restricting food access, particularly for vulnerable populations.
- The National Enabling Technologies Strategy states that the convergence of biotechnology and nanotechnology has "the potential for even greater benefits". Such optimism should also be countered by consideration of the potential risks to emerge from this convergence. Indeed, the British Royal Society acknowledges hybrid bio-nano machines, and recognises converging technologies as a profound issue (The Royal Society, 2004).

3. Public engagement activities should be transparently linked to policy and regulation.

- There is no transparent process for linking public engagement activities with policy outcomes. Indeed, formation of two sections within the Department of Innovation, Industry, Science and Research (Enabling Technologies Policy Section and Enabling Technologies Public Awareness Section) – as detailed in the Discussion Paper – appears to separate public awareness/engagement activities from policy. This structure is likely to relegate public engagement and its outcomes to the margins.
- Australian policy and regulation is already out of step with international policy and regulation. For example, in 2009 the European Parliament voted to introduce new rules on nano-materials in cosmetics: any cosmetic containing nano-materials will have to have it listed on product packaging, followed by the word nano.
- There is no information about how the 3-stage circular strategy related to public awareness and community engagement was informed and devised. Nor is there any clear information about how feedback from this strategy will be built into further activities.

4. Public engagement activities should be auspiced and managed by Government agencies that are independent of industry, and should be independently and continuously evaluated, providing opportunities to revise engagement processes and policy outcomes in light of this feedback

- The Australian Government currently plays the role of both nano-champion and nano-regulator, roles that present a conflict of interest for Government. There is no indication of how this conflict of interest will be managed. There is also no indication of how the current (and future) engagement processes will be evaluated, and the opportunities for policy outcomes to be revised in light of such evaluations.

5. Public engagement activities should be adequately funded and resourced across the entire policy cycle.

- There is no indication that public engagement activities will be adequately funded across the entire policy cycle.

6. Public engagement activities should be conducted with impartial and expert facilitation.

- There is no indication of who will facilitate the upcoming forums, and on what basis this organization/individual was selected.

We would welcome the opportunity to speak with the managers of this consultative process, and would be pleased to discuss with facilitators how to ensure that established principles for community engagement (such as the six point framework utilised here) can guide the new Enabling Technologies Strategy.

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