

NanoJury – Public engagement on nanotechnologies

The NanoJury

NanoJury was the first citizens jury on nanotechnology in Europe. It brought together 15 randomly chosen people from different backgrounds in a particular region of the UK, to hear evidence about nanotechnologies and the roles they might play in a range of possible futures.

The jury has sought to provide a vehicle for people's views on nanotechnologies to have an impact on policy. It has allowed a dialogue between people with diverse perspectives and interests, and created a democratic space in which citizens can examine the hopes, aspirations, assumptions and fears of those working to develop and regulate nanotechnologies.

Over five weeks, the jurors met for two evenings a week, with a total of 10 sessions in all. After an introduction to technology issues in general, and nanotechnologies in particular, they began witness sessions. They heard from a variety of witnesses, including scientists, civil society representatives, and government advisers. Jurors questioned and debated with witnesses and each other. The jury then deliberated and drew up a set of recommendations.

NanoJury Findings

The jury came up with a wide range of recommendations that can be summarised in four categories:

Governance of science and technology

- more open deliberation about science policy
- greater public involvement in nanotechnology policy making

Nanotechnology research priorities

- public funding should focus on long term problems that will may be addressed by business, especially health and environment
- an aim should be to create good jobs

Openness and transparency

- labelling of nanotechnology products
- more openness of research priorities

Risks and regulation

- testing of manufactured nanomaterials before release

Lessons of the NanoJury

Nanotechnology presents an opportunity to address the social and ethical aspects earlier in the innovation process while the direction technological development is still being established.

This early stage deliberation about the form and role of nanotechnologies in society requires governments, scientists and the wider public to engage in open dialogue.

The challenge is not easy – and the globalising world makes the governance of technologies even more complicated. But our experience of the NanoJury and other public engagement activities suggests that engaging in public discussion about the difficult questions of future technologies can be informative and engaging for all participants.

What is a Citizens' Jury?

- Group of people recruited to participate in process lasting several weeks
- The Jury is informed of the topic to be considered
- The Jury then questions witnesses
- The Jury deliberates and write their conclusions
- The process is overseen by a panel comprising a wide range of perspectives

What difference did the NanoJury make?

The recommendations of the NanoJury were received by the UK government and will be used as part of its wider public engagement strategy. At a European level, the NanoJury has been used to make contributions to the two main FP6 projects on public engagement and nanotechnology: Nanodialogue and Nanologue.

The experience of engaging with citizens on issues of nanotechnology has also been educative for participating scientists. And the highlights of the process and the jury's recommendations have been communicated to Frontiers partners and beyond by Dr Robert Doubleday, Prof. Mark Welland, and media that reported on the NanoJury.

The citizens' jury was widely reported, for example in:

BBC Online (2005) "Citizens' jury to tackle nanotech", 23 May 2005. Available:

news.bbc.co.uk/1/hi/sci/tech/4567241.stm

Boeing, N. (2005) "Vorsicht vor den kleinen Teilen: Erst Bürgerjury in Europa hat ihr Urteil über Nanotechnologie gefällt", *Die Tageszeitung*, 22 September 2005: 7.

Meiklem, P. (2006) "Big Future, Small Science", *Big Issue Scotland*, 6-12 April 2006: 20-22.

Mekel, M (2006) "Commentary: Civil Engagement Versus Social Engineering: What can be learned from NanoJury UK?", *Centre on Nanotechnology and Society*.

Available: www.nano-and-society.org/commentaries/commentary_mekel.html

Nature (Editorial) (2005) "Value-free nanotech?", *Nature*, **437**: 451-452.

Rogers-Hayden, T. and Pidgeon, N. (2006) "Reflecting Upon the UK's Citizens' Jury on Nanotechnologies", *Nanotechnology Law & Business*, **3** (2).

Sample, I (2005) "Citizens' Jury to weigh up the case for nanotechnology", *The Guardian*, 19 May 2005

Sample, I (2005) "Citizens' Jury delivers verdict on safety", *The Guardian*, 22 September 2005.

- Sample, I (2005) "It's good to talk: can the Citizen's Jury on nanotech avoid another GM-style fiasco?", *The Guardian*, 28 July 2005.
- Welland, M. (2005) "Now we're going public", *The Guardian*, 19 May 2005: Life, 10.
- Welland, M. (2005) "NanoJury", *Science and Public Affairs*, December 2005, Page 14.
- Wilsdon, J. (2005) "Small talk: new ways of democratising science and technology", *openDemocracy*, 27 September 2005. Available: www.opendemocracy.net/globalization-accountability/science_2871.jsp

Doubleday and Welland have spoke on various media, science festivals and academic conferences about the process and findings of the NanoJury. A selected list of these dissemination activities appears below:

Half-hour Japanese TV programme on the NanoJury
BBC Radio 4, *Material World*, "Nanotechnology in Context", 1 December 2005.

Edinburgh Science Festival, 8 April 2006.
Cambridge Science Festival, 18 March 2006.
Cheltenham Science Festival, 9 June 2005.

Invited talks to:

TA NanoNed project (Utrecht, July 2006)
Gothenburg (Sweden, May 2006)
University of Sheffield, (April 2006)
Science Council of Japan, (Tokyo, February 2006)
Chalmers University of Technology (October 2005)
NanoScale Science and Technology Facility, (Cornell, June 2005)
UK Institute of Food Research, (Norwich, July 2005)
Horizon R&D Conference (Cambridge, April 2005).
European Commission workshop, (Brussels, April 2005)
iNano Seminars. (Aarhus, December 2004)

Web links:

[The Guardian](#)
[Greenpeace](#)
[NanoJury Website](#)

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