

SNet Conference University of Twente 24 October 2012

Technology Assessment

The need for a comprehensive view on public engagement in S&T – the case of nanotechnology in the Netherlands

Rinie van Est

Dirk Stemerding

Bart Walhout (University of Twente)

Virgil Rerimassie

Lucien Hanssen (DEINING Societal Communication & Governance)

Background



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- Article to be published in special issue of the International Journal of Emerging Technologies and Society focusing on public engagement in emerging technologies (Vol. 10, 2012: available online)
- What has been the role of public engagement in relation to the emerging field of nanotechnology in the Netherlands?

How to frame "public engagement"?



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- Important but too limited concept to account for our experiences with the nanodebate in the Netherlands
- Aim of public engagement is to bring in a public perspective into S&T development and policymaking, which involves an ensemble of activities:
 - Addressing a variety of regulatory, social and ethical issues
 - Not a one-off event, but developing over time and involving a variety of actors

In search for new frame



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- How to bring in a public perspective in the complex interactions between society, science and government?
- Two dimensions:
 - Activities of *informing* and *engaging* as two approaches in terms of which the interaction between society, science and government can be understood (Public Understanding of Science versus Public Engagement in Science)
 - Societal, S&T, and political sphere as different actor worlds to which informing and engaging activities may apply (CSOs & citizens, scientists and technologists, MP's and civil servants)



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Societal sphere

the public debate on

science and technology

nforming	Public understanding of science One-way communication to inform lay citizens	Classical ELSI-research, upstream reflection ELSI-research to timely signal problems and inform researchers to stimulate development of desirable solutions	Classical parliamentary TA TA research to timely inform MPs
ngaging	Participatory TA, public dialogue, upstream public engagement	Constructive TA, real-time TA, upstream public engagement	Participatory parliamentary TA
	Two-way communication between citizens, experts and policy makers; TA to stimulate	Engaging scientists in a dialogue with citizens and stakeholders to identify problems and stimulate the	TA to timely engage MPs in the political debate on science and technology

development of desirable

solutions

S&T sphere

Mapping the nanodebate



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- Framework alows us (1) to map the activities aiming to inform and engage actors in the three different social spheres, and (2) to analyse the ways in which information and engagement processes shape the governance of S&T
- Mapping the nanodebate: instead of discussing a single public engagement event – such as the Dutch nanodialogue – we have taken a long-term and comprehensive view: describing a whole ensemble of activities that were organised in the Netherlands over the last decade to integrate a public perspective into the development of nanoscience and technology

			verandstennismiking
	Societal sphere	S&T sphere	Political sphere
Informing	 Rathenau study (Van Est et al. 2004) Societal Dialogue Nanotechnology (2009-2010) 	 Foresight study STT (1998) TA NanoNed (2005-2010) TA NanoNextNL (2011) 	 Expert Committee Royal Academy of Art and Sci (2004) Gezondheidsraad (2006) Cabinet View on Nanotechnologies (2006) Dutch Food and Consumer Product Safety Authority (VWA 2007) Action Plan on Nanotechnologies (2008) Rathenau study on nanodialogue (Hanssen et al. 2008) Advice by Social Economic Council (SER 2009) Agenda for Nanotechnology by Commission Societal Dialogue Nanotechnology (CSDN 2011)
Engaging	 Rathenau workshop on nanotoxicity (2004) Series of Rathenau workshops (2004) Rathenau workshop with CSOs (Hanssen et al. 2008) Societal Dialogue Nanotechnology: CSO participation in 8 out of 35 projects (2009-2010) 	 TA NanoNed (2005-2010) TA NanoNextNL (2011) 	 Public meeting "Small technology – Big consequences" organised by Rathenau & parliamentary Theme Commission (2004) Parliamentary debates (2004-2011) Stakeholder platform Sound Board Group Risks Nanomaterials Parliamentary round table hearing organised together with the Rathenau Instituut (Parliamentary Documents 2009a).

Analysing the nanodebate



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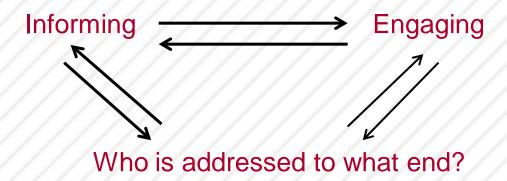
- Questions to be considered:
 - 1. Which types of activities have (not) been organised?
 - 2. Relationship between informing and engaging activities?
 - 3. Interaction between information and engagement processes within the different social spheres?
 - 4. Ways to overcome organisational and institutional inertia in the governance of S&T?

Informing and engaging



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- Both informing and engaging play important, complementary roles: drive each other! (as for example Health Council Report)
- Engagement processes require custom-made information (as for example produced in the Dutch Nanodialogue)



Interaction between the spheres



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- Informing activities in societal and S&T sphere have impacted activities in the political sphere
- Initiatives in the political sphere have impacted engaging activities in societal and political sphere
- · Impact of engaging activities on political sphere less clear-cut!

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Conclusion: dynamics and constraints in the Dutch governance of nanotech



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- Dynamic pattern of interaction between informing and engaging and between different social spheres
- But also constraints in the relation between spheres. Might to some extent be necessary constraints, especially in regard to "public engagement"? Ten Lessons for a Nanodialogue (Rathenau Instituut 2008)