

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

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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?

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)

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

	Societal sphere	S&T sphere	Political sphere
Informing	<ul style="list-style-type: none"> Rathenau study (Van Est et al. 2004) Societal Dialogue Nanotechnology (2009-2010) 	<ul style="list-style-type: none"> Foresight study STT (1998) TA NanoNed (2005-2010) TA NanoNextNL (2011) 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> TA NanoNed (2005-2010) TA NanoNextNL (2011) 	<ul style="list-style-type: none"> 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).

Informing and engaging

- 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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dyname kennis
 verandering - innovatie

	Societal sphere	S&T sphere	Political sphere
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Engaging	<ul style="list-style-type: none"> Rathenau workshop on nanotoxicity (2004) Series of Rathenau workshops (2004) Rathenau workshop CSOs (Hanssen et al. 2008) Societal Dialogue Nanotechnology: CSO participation in 8 out of 35 projects (2009-2010) 	<ul style="list-style-type: none"> TA NanoNed (2005-2010) TA NanoNextNL (2011) <p style="text-align: center; font-size: 2em; color: red;">?</p>	<ul style="list-style-type: none"> 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).

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)