

## **Empowering Citizens in International Governance of Nanotechnology**

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Sustainable Nanotechnologies

## Malsch Techno Empowering Citizens Valuation

- Introduction
- Contributions from international relations and deliberative democracy to an ideal model for multistakeholder governance of emerging technologies
- Potential role of software decision support in democratising such governance
- Conclusions

### Empowering Citizens Introduction



### Who am I?

Dr Ineke Malsch, director of Malsch TechnoValuation: Consultant on Technology and Society:

- EthicSchool for Responsible Innovation <u>www.ethicschool.nl/english</u>
- EU projects: currently NanoEIS <u>www.nanoeis.eu</u>, NMP-DeLA, <u>www.nmp-</u> <u>dela.eu</u> and SUN <u>www.sun-fp7.eu</u> , SYNENERGENE <u>www.synenergene.eu</u>

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- Publications on societal and ethical aspects of emerging technologies incl. nanotechnology.
  - Located in Utrecht, since 1999. www.malsch.demon.nl

#### C.V:

- Graduated in Physics, University of Utrecht, 1991
- Postgrad. education in Environmental Impact Assessment and Social Studies of Science and Technology
- Scholarship STOA, European Parliament, Luxemburg, 1995-1996
- Fellowship nanotechnology IPTS, JRC, EC, Sevilla, 1996-1998
- 1 year part time study Theology, KTU, Utrecht, 2004-2005
- PhD in Philosophy, Radboud University Nijmegen, 2011.
- Thesis: Ethics and Nanotechnology; Responsible development of nanotechnology at global level in the 21st century: <u>http://repository.ubn.ru.nl/handle/2066/91234</u>

### Empowering Citizens -Introduction



#### This is a thought experiment

Assuming an ideal world

Where international norms are adopted democratically

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By representatives of all countries and all global citizens

And exploring the role a decision support tool could play

In empowering citizens in international governance

During the norm creation process



#### Empowering Citizens -Governance

International relations theory:

	Actors in international governance:			
	Governmental	States		
		International organisations		
	Trans-National Actors (TNA) or networks (Risse, 2002)	(Non-governmental) advocacy networks diffusing norms		
		Epistemic communities (Haas, 1992) diffusing causal knowledge		
		Multinational companies		

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## **Epistemic communities** (Haas, 1992):

..."network[s] of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue area, with:

A shared set of normative and principled beliefs ...

Shared causal beliefs ...

Shared notions of validity ...

A common policy enterprise ...

The major dynamics of epistemic policy coordination are uncertainty, interpretation and institutionalisation".



Three phases in the international policy cycle (Risse 2002):					
Agenda Setting	Trans National Actors most influential: e.g. ETC group for nano, 2003				
International Norm Creation	Dominated by states and international organisations. Present for nano: joined by epistemic communities and multinational companies				
Norm Implementation	TNA monitoring role. Future for nano				

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International relations theory

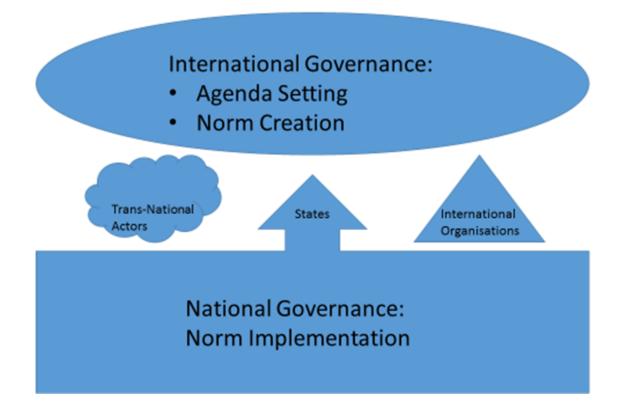
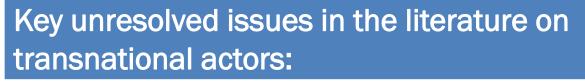


Figure 1: The actors involved in international governance following Risse (2002).

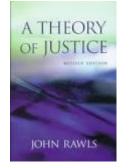


Risse (2002): How can global governance by increasingly complex tripartite networks solve the dual problem of ensuring '**input legitimacy**' of those concerned by the legislation

And 'output legitimacy' through effective and enhanced problem solving?"

e.g. Malsch (2011): "how to **govern** the emerging technology **responsibly** during the period of **international norm creation**?"





### Input legitimacy: Rawls, A Theory of Justice (1971, 1999)

Deliberative democracy

Participation model of pure procedural justice:

those affected by a decision may participate in the process by which the decision is made

Justice as Fairness

#### Aims:

a criterion of justice agreed upon by all under conditions fair to all;

to assess the fairness of the institutions of society,

to structure moral discussions

while recognising the plurality of moral frameworks in a democracy

and to justify the outcome of those discussions

Ethics and Political philosophy

- Input legitimacy (Habermas)



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Figure 2: Combining Global and national citizenship following Habermas (2011)

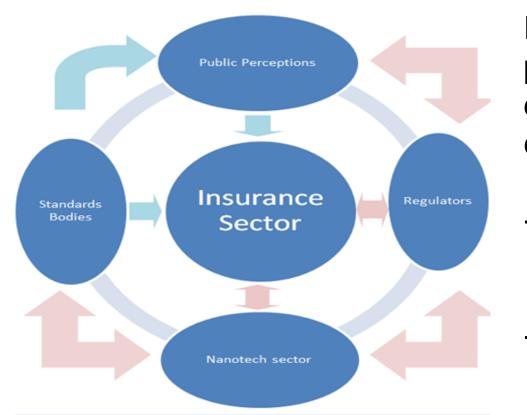


Figure 3 illustrates how key centres of civic influence and decision-making can mutually effect and benefit one another through multiple self-reinforcing feedback loops.

Ethics and Political philosophy - Governance during international norm creation

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- Ethics complementing law
- Role of Insurance companies as proxyregulators



# MalschTechnoEmpowering Citizens –<br/>decision support

## Option: an MCDA wiki-tool

- Aim: contribute to democratising international norm creation
- Two entries: data input / value preferences input

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Automations Automations Baseled Baseled Ange Baseled Ange A	<text><text><text><text><text><text></text></text></text></text></text></text>	- Singny     - Singny	Support transparent formation of epistemic community	Support stakeholders to influence political choices	
	control to the actions: (viii array:)         Reading base based on the Action - Outcompt - Actions: Proceedings         Define a direct on the Action - A	On the day	Collect relevant data and explicitly consider uncertainty	Develop indicators to monitor value conflicts between stakeholder groups	
			Support evidence based international norm creation	Support fair and democratic international norm creation	

# MalschEmpowering Citizens –<br/>decision support

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Supporting access to the governance arena for transnational actor networks:

	Supporting global citizenship	adoption of new international norms
Epistemic community	Representative democracy	UN General Assembly & ideal Global Parliament
Private experts Multinational	Direct democracy	all citizens participate in international norm creation
Companies Insurance companies		



- International relations theory and deliberative democracy allow for sketching an ideal model for multistakeholder governance of emerging technologies
- Software decision support could play a role in democratising such governance
- Further work is needed to assess feasibility and to specify design criteria



#### Empowering Citizens References

ETC group, "Size Matters! The case for a global moratorium," ETC group, Winnipeg, Manitoba, Canada, 2003 (and other reports)

Haas, P.M. (1992) Introduction: Epistemic Communities and International Policy Coordination, in International Organization, Vol. 46, No. 1, Knowledge, Power, and International Policy Coordination. (Winter, 1992), pp. 1-35.

http://links.jstor.org/sici?sici=0020-

8183%28199224%2946%3A1%3C1%3AIECAIP%3E2.0.C0%3B2-%23

Habermas, J. (2011), Recht en politiek in een tijd van globalisering, Klement / Pelckmans, Zoetermeer / Kapellen. [Law and politics in times of globalisation]
Malsch, I. (2011) Ethics and Nanotechnology; responsible development of nanotechnology at global level in the 21st century, PhD thesis, Radboud University
Nijmegen, <u>http://repository.ubn.ru.nl/handle/2066/91234</u>
Rawls, J. (1971) A Theory of Justice, Harvard University Press
Rawls, J. (1999) A Theory of Justice revised edition, Belknap
Risse, T. (2002) Transnational actors and World Politics, in Carlsnaes, W. Risse, T. and Simmons, B. (eds) Handbook of International Relations. London et al, Sage, pp 255-274





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