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## NanoTrust – Nano Risk Governance: Extending the Limits of Regulatory Approaches through Expert Dialogues

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**OAW**  
Österreichische Akademie der Wissenschaften  
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### Overview

1. Introductory remarks
2. The story in two parallel chapters
  1. The development of NanoTrust
  2. The Austrian Nanotechnology Governance and the Role of NanoTrust
3. Concluding remarks

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## 1. Introduction

- NanoTrust ist a long story (8 yrs. running, 12 yrs. including the preparatory activities)
- Nano as a highly blurred umbrella term (interdisciplinary research, no general definition, „enabling technology“ - a lot of conceivable applications, ...); „moving target“
- Trends in public opinion towards nanotechnology: high expectations (esp. medical sector), moderate concerns (esp. food sector), low knowledge
- Influenced by former technology choice debates (gene technology) feared by nanotechnology researchers

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## NT safety - timeline

2000	NSF reports (USA) on societal implications of NT
2003	TAB-report (D)
2004	EU strategy
2005	EU action plan
2006	Publifocus (CH), Action Plan (D)
2007	Research Strategy (D)
2008	Action Plan (CH)
2010	Action Plan (A)

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## 2. The story in 2 versions

- Phases of NanoTrust – 1 to 4
  - Preparation
  - NanoTrust 2007 – 2010
  - NanoTrust2 2010 – 2013
  - NanoTrust3 2013 – 2016
- Elements of the Austrian Nano Governance System – 1 to 3
  - Austrian Action Plan Nanotechnology (ÖNAP) – 2008 - 2010
  - Nano Information Platform (NIP) – 2010 ongoing
  - Nano Information Commission (NIK) – 2013 ongoing

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### 2.1.1 Phase 1 – Preparation phase

- 2003: Start of the Austrian nanotechnology research program (Nano Initiative, NI)
- 2003, spring: First attempts to contact the NI management, to introduce a 4th line of research: TA and other nanosafety projects (University of Vienna)
- 2006: lecture series on EHS topics at the University of Vienna (funded by the NI) – book (Gzásó et al, Springer, 2007)
- 2006: report on the status of the European nano EHS research (carried out by ITA & UVie under contract to BMVIT)

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### 2.1.2 Phase 2 – NanoTrust

- 10/2007 – 09/2010, BMVIT (M. of technology)
- Interdisciplinary, 3 persons (TA, risk research, cell biology) + some budget for external expertise (contracts)
- ITA, research project (with some peculiarities)
- Development of different formats (NT-dossiers, annual conference)
- Start of „Nano-Plattform“ (M. of environment)
- Austrian Action Plan Nanotechnology (03/2010)

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### 2.1.3 Phase 3 – NanoTrust 2

- 10/2010 – 09/2013, first prolongation
- Nano Information Platform (NIP), M. of Health (BMG)
- Aim: public information webpage (nanoinformation.at)
- Establishment of a special working group on nanosafety in workplaces (Austrian Workers Compensation Board, AUVA)
- Establishment of an independent nano risk research program: nano-EHS-program (2011, 4 calls so far)
- Launch of nanoinformation.at in 11/2012

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### 2.1.4 Phase 4 – NanoTrust 3

- 10/2013 – 09/2016, 2nd prolongation
- Some changes
- Additionally to the M. of technology, 3 other ministries decided to fund NT: Health, Environment & Social Affairs (2 Dpts. Worker safety and Consumer protection)
- Focus on safety and regulatory relevant topics, cell biology leaving: 1,5 instead of 3 full time equ., external budget unchanged
- Publication of another book at Springer (Gazso & Haslinger: Nano Risiko Governance, 2014) – summary of 6 yrs of NT

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### Element 1 (09/2008 – 03/2010) Austrian Action Plan Nanotechnology (ÖNAP)

- Initiated by the M. environment (BMLFUW)
- Organised in 4 working groups (recruited from the Nano-Plattform): environment, health, science, economy)
- 50 recommendations
  - Independent safety research (nano-EHS-program), public nanoinformation website (nanoinformation.at), continuation of NanoTrust
- Published in 11/2009, adopted by the „Ministerrat“ in 03/2011
- Event in international nano action plans (Nano-Plattform meeting)
- NanoTrust: attended all 4 groups and made major contributions in terms of content and structure

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## Element 2 (04/2010 on-going) Nano Information Platform (NIP)

- Breakout group from „Nano-Plattform“: ca. 10 institutions (ministries, agencies, scientific institutions, chamber of commerce, consumer protection NGO, environmental NGO)
- Responsibility: M. of Health
- Took up its activities in spring 2010 (right after the publication of the action plan)
- Informal, but very stable
- Monthly meetings
- Main task: setting up and maintaining a public information strategy (launch of website in 11/2012)
- NanoTrust: partner from the onset, structural, procedural and scientific input

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## Element 3 (09/2013 on-going) Nano Information Commission (NIK)

- Chair: André Gzásó
- Established in 09/2013, inaugural meeting attended by the Minister
- Scientific commission of the Ministry of Health = advisory body of the responsible minister
- 24 members
- NanoTrust: one membership (+ substitute)
- Aim: collect, evaluate and disseminate safety relevant knowledge in regard of the use of nanomaterials and nanotechnologies
- Organisation and maintenance of the public information website (permanent NIK working group)

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## Nano Information Commission

- Rules of procedure – worked out by the NIP group between 01/2013 and 07/2013
- Paragraph 2
  - Advisory body (of a minister) – political counselling
  - Societal relevant aspects
  - Scientific body – reliance on scientific findings
  - Diversity of opinion and inclusion of different scientific expertise
  - Communication – Nano Information Webpage

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## NIK Geschäftordnung § 2 - Wirkungskreis

(1) Die Kommission ist **beratendes Organ** des für die Angelegenheiten der Verbrauchergesundheit zuständigen Mitglieds der Bundesregierung in Bezug auf **gesellschaftsrelevante** Aspekte der Nanotechnologie. Im Vordergrund ihrer Tätigkeit steht die **Kommunikation**, die Abbildung der **Meinungsvielfalt** sowie die **fachlich fundierte Darstellung des vorhandenen Wissens** inklusive entsprechender **Handlungsoptionen** basierend auf dem jeweils aktuellen Stand der Wissenschaft unter Berücksichtigung der Expertisen **unterschiedlicher Fachdisziplinen**.

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### 3. Concluding remarks

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### Political counselling as team work

- You cannot do science based political counselling on your own (no political „advisory guru“)
- It is always team work and the achievement of a group
- Therefore, this endeavour is highly inter- and transdisciplinary

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## Trust

- This means that the success of the team depends highly on the behaviour of its members
- Trust has to be built up AND maintained over years
  - Reliability is a key factor
  - Competence is important
  - Faith in the process – that it will to a result which will benefit all members
  - Good-will (belief that every member will contribute)
  - All partial (neutral) platform for discussions
- Communication intense

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## Continuity

- Even such informal groups like the NIP can stick together for many years (2010 until now)
  - Common understanding of what the task is
  - Rather tight working schedule
  - Has to be organised by somebody (leader and organiser do not necessarily have to be the same)
- Continuity is connected to some amount of formalisation (protocolls, dissemination and storage of knowledge, moderation of discussion, sometimes even the prioritisation and choice of issues)

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## NanoTrust – increasing institutionalisation

- NT3 is funded by 3 additional ministries
- Establishment of the Nano Information Commission of the Ministry of Health – NanoTrust holds the chair until 2018
- This is rather unusual for a research project

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## NanoTrust – Role as a knowledge organiser

- Task: robust and regulatory relevant knowledge on EHS issues
- Negative side effects can be detected on a very early stage (Liebert/Schmidt, 2015, p.2)
- organizing the process of knowledge creation mostly in the form of transdisciplinary expert dialogues
- NTr has engaged itself in expert networks and risk assessment committees (Austrian Nanotechnology Action Plan, Nanoinformation Commission, etc.) right from the beginning
- Sometimes even as initiator of expert discussions – serving as an all-partial platform

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## NanoTrust – Role as part of the system

- NT as part of the regulatory system
- no longer possible to remain in the role of an observer
- initiating joint activities, coordinating and eliciting discussions
- and sometimes even suggesting aims and visions (public risk communication)

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## NanoTrust – Role as „Honest Broker“

- Organising knowledge (science based advice) – beyond the myth of the issues (Pielke, keynote) into the factual substance
- Roles of NTr within these networks has to be unambiguous
- And openly communicated
- Therefore, the role of the NanoTrust project (and its members) had to be carefully reflected
- Tension between organising and encouraging the national nanosafety research and being a competitor in this field – you have to decide, which role you will play –
  - and this means that you cannot take part in several other activities and you have to do without certain funding possibilities
  - Which means that this work has to be funded from an independent source

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**Thank you for your attention !**

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**Mirella Freni**

80th birthday

February 27, 2015

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