

RESPONSIVE REGULATION OF INNOVATION BEHAVIOUR FOR SUSTAINABILITY - RESINA

Responsive Regulation of Nanomaterial Risks

The project focusses on the institutional framework in which businesses innovate in the area of nanomaterials. It analyses to which extent the framework contributes to the guiding principle of sustainable development. Thus the incentive situation of the significant actors (trade and industry, consumers, authorities) resulting from the current legal situation and other influences, such as market demands, has to be identified.

Measured by the normative objectives of the REACH and CLP Regulations which aim at a high level of protection of human health and the environment and are based on the precautionary principle a precondition that innovations are directed towards sustainability is that they are based on a nano-specific risk assessment and risk management.

Research questions

- Do REACH and CLP set sufficient incentives to identify and reduce nanomaterial risks?
- Should the legal framework be modified and if so, how?

Evaluation Framework

The behavioural assumptions of the homo oeconomicus institutionalis allow an interdisciplinary institutional analysis linking regulatory impact assessment approaches with actor-related approaches of the social sciences. Lawyers cooperate with national economists and business economists. Various business partners, ranging from SME to global corporations, are also involved.

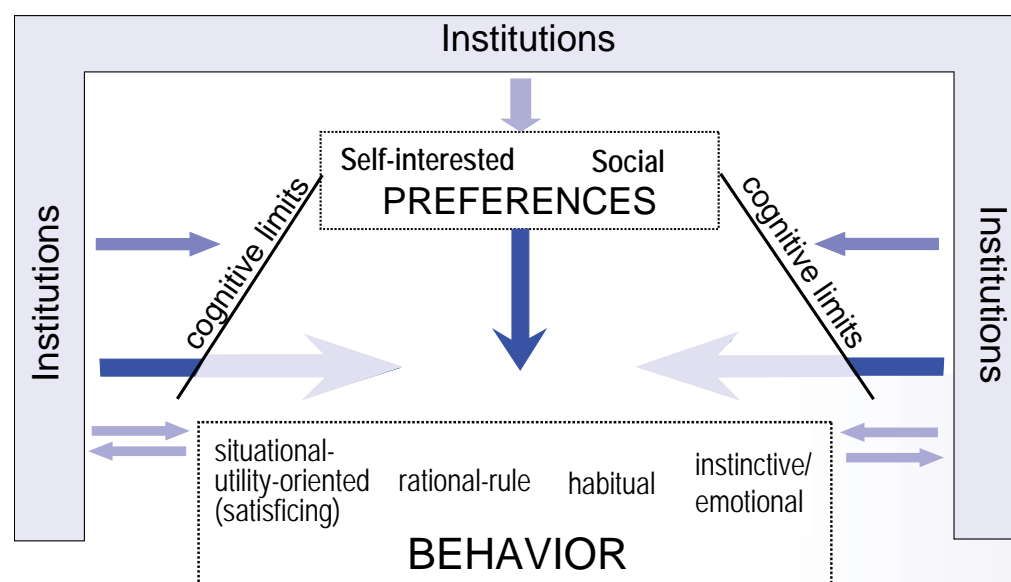


Fig.: Homo oeconomicus institutionalis

Methods applied

- Analysis of legal framework for nanomaterials as well as other elements of the actors' further institutional framework (market conditions, liability, compliance costs, risk perceptions etc.)
- Supplemented by company survey to assess innovation and risk assessment practice
- Regulatory impact assessment delta-analysis: Identification of gap between normative sustainability objectives and real behaviour
- Development of alternative governance options and experimental test of options in simulation game with industry representatives

Central outcomes

Incentives set by REACH and CLP are not sufficient. Only few nanomaterials become subject to the registrations regime. Legal uncertainty, i.e. related to substance identification and information requirements, impede meaningful risk assessment. To reduce the incentive gap, a step-wise modification of governance arrangements is suggested:

- In the short term, better and more targeted information on the market opportunities offered by the legislation can foster the motivation of actors to ensure a high level of protection
- In the mid-term, however, additional legal requirements specific to nanomaterials are necessary, including:
 - New endpoints for solid physico-chemical characterisation
 - Clarification that duty to „adequately control“ substance related risks refers also to situations of „risk potential“ where uncertainty prevails
- More adequate tonnage thresholds for key requirements

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Industry partners



Partners from Science

Göttingen University, University of Augsburg/St.Gallen

Processing of the research project

Society for Institutional Analysis at Darmstadt University of Applied Sciences
Prof. Dr. Martin Führ, Julian Schenten

More information:

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