

SEBEROC

Simulation and Evaluation of Better Regulation of Converging Technologies

Summary

The SEBEROC project is carried out on behalf of the SKEP Network and aims at a better regulation of converging technologies.¹

In particular, the project aims at applying the “Better regulation” approach to the regulation of nanotechnology and genetic engineering. In this context “Better regulation” is not only about seeking to reduce red tape, but also applies the broader understanding of good governance. This enables decision makers to come to a well-balanced set of regulatory options, and take well-informed decisions, by incorporating economic, as well as social and environmental aspects.

For this purpose SEBEROC tests a novel, robust method of information dissemination, and public engagement and participation in the management and regulation of emerging and converging technologies.

The tasks of the project are to carry out a retrospective regulatory impact assessment in the field of genetic engineering and a prospective regulatory impact assessment in the field of nanotechnology.

The project takes a special view on human health and environmental impacts deriving from everyday products which are handled by consumers.

The environmental and health impacts from a product made with the help of new technologies or directly containing new technologies substances depend on the ways in which this product is handled by the actors along the product chain, including the consumer/end-user. Therefore, knowledge and perception of all groups handling these novel products, including consumers, should be considered

when drafting, evaluating or amending regulatory approaches. In particular, effects from the use of such products will probably mainly occur in consumers’ environments.

- This is especially true in the case of nano-silver which is increasingly being used in consumer products, e.g. washing machines, textiles, cosmetics or food packaging. While nano silver serves as an antibacterial agent in the products mentioned, it is not yet known what environmental or health effects are related to extensive use of this nano material.
- The link to consumer behaviour is more indirect in the case of GMO soy. GMO soy is part of the feed of cattle; from a scientific point of view, these GMOs won’t become part of milk, meat, eggs or fish. But consumers might gain this impression, which might lead to an avoidance of these products. At the same time the avoidance of GMO soy would lead to a protein-gap in the EU.

Especially the information on nanotechnology risks and opportunities, and the proper handling of related products will have to reach consumers in order to give them the opportunity to take a stand and deal with this technology. There are different ways in which the public can become informed, but the most suitable approach will depend on the informational behaviour of the individuals concerned. So it must be taken into account that European consumers living in different informational and regulatory settings might have different strategies and routines of staying informed and they might also have different levels of risk awareness which also must be taken into account when providing information.

¹ SKEP ERA-NET is a partnership of 17 government ministries and agencies, from 13 European countries, which funds environmental research.



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Therefore, the research design is informed by the concept of responsive regulation that pays particular attention to the ways actors and consumers respond to regulation and handle products due to the incentive structure and/or routine behaviour. Focus groups to be carried out in Austria, Finland, Germany, the Netherlands and the United Kingdom lie at the heart of the project. The specific topics to be used for the focus group discussions will be determined in coordination with non-governmental organisations (NGOs).

NGOs are important promoters for economical, social or environmental interests. They are certainly not the only ones, but they are potential political agents for bringing in and amplifying the interest of the public in regulatory approaches to converging technologies. The interests of the civil society as organised in non-governmental organisation will have to be taken into consideration by the legislator to ensure good quality consultation in the impact assessment process. Therefore, the citizens' practical handling of the targeted technologies will have to be considered in the consultation process for their regulation. The results of the focus group discussion could be useful in terms of supporting NGOs in the process of political negotiations in order to strengthen the stake of consumers or citizens and realise more appropriate regulation.

For the case of converging technologies, one must bear in mind that the convergence of these technologies is currently still in its infancy and products are a long way from being released onto the market. At the moment, convergence only takes place in laboratories. Nevertheless, the findings of both regulatory impact assessments will contribute to a better understanding of the regulatory problems which occur when these technologies converge in the future and have an impact on the public. This will allow for deeper insights to be gained into the framework conditions with which the regulation will be confronted in the future.

The consortium brings together researchers

from Austria (ifz, Graz), Finland (SYKE – Finnish Environment Institute, Helsinki), Germany (sofia, Darmstadt), the Netherlands (University of Amsterdam and VU University Amsterdam) and the United Kingdom (University of Cardiff).

The research will run for a period of 2 years until the end of 2011.

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