ResAGorA
Governance framework for Responsible Research and Innovation

Case Study

Responsibilisation phenomena relating the EC Code of conduct for Responsible Nanosciences and Nanotechnologies Research

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Introduction

The European Commission code of conduct for responsible nanosciences and nanotechnologies research (EC CoC) is a meaningful case of soft regulation of an emerging technological field. Namely, it can be deemed as an instrument of meta-regulation and as an example of distribution of the responsibilities among stakeholders. Between 2007 and 2011 three major consultations concerning the code have been launched. Consultation processes can be deemed as a tool to implement the compliance with the EC CoC and thus to foster the allocation of the responsibilities. They also permit to analyze the genesis of the EC CoC from its drafting to its adoption and thus to follow for the first time the development of RRI normative anchor points within a Community instrument, their influence on the principles and guidelines of the code, and their perception among stakeholders: in sum, consultation processes make it possible to study one possible path for anchor points to entry regulation and to affect stakeholders' behaviour.

Case summary

Normative anchor points are EU goals set forth in the Treaty on the European Union such as techno-scientific advance, market competitiveness, sustainablility, public health and fundamental rights. They are recalled in the preamble of the 2008 recommendation on the EC CoC which should be deemed as the outcome of their interaction. As the EC CoC focuses only nanoscience and nanotechnology research, it addresses mainly member States (which play a brokering role), researchers (and research centers), research funding organizations, and civil society organizations. Between 2007 and 2011 three consultations have been launched: two directly by the European Commission (in 2007 and between 2009/2010) and one, as part of a FP7 project, the NanoCode project (between 2010/2011). They are all examples of responsibilisation processes, namely examples of tools aimed at fostering the distribution of the responsibility among stakeholders. In the first two Commission consultations, key actors in the responsibilisation process are EU authorities and member States, which have the task of involving all stakeholders; in the latter survey the key actor is academia, which provides tools for supporting the implementation of the EC-CoC. The 2007 consultation (64 participants) was aimed at drafting the EC CoC, whilst the 2009/2010 survey (49 participants), as well as the NanoCode survey of 2010/2011, was aimed at analyzing the perception of stakeholders corresponding to the CoC addressees. Finally the 2010/2011 consultation was also meant to provide some practical tools for helping the compliance with the code (e.g. the CodeMeter). While these consultations are led with different methodologies, by taking into account different respondents' samples and with different extent and composition, the indicators that emerge from their data are quite convergent. i) First of all the compliance with the principles of the code (which should not be confused with the anchor points) seems to be low. 21% of participants of the NanoCode survey (dated 2011), which involved more than 400 respondents, seem to have adopted the EC CoC, although some participants were already using other codes. This low level of compliance was consistent with the fact that up to 2011 no EU Member State but The Netherlands formally adopted implementation measures for the Code. ii) Some principles have been embodied in the final version of the code (i.e. 'sustainability', 'excellence', 'precaution', 'accountability') and some matters (i.e. human enhancement, nanofood and feed) mentioned in the 2007 survey have been dealt with. iii) The engagement of EU and member States appeared quite low, as the interviewees report by referring, for example, that there is no official platform informing about the EC CoC and helping stakeholders in complying with EC CoC principles and guidelines. Public authorities engagement seems to be needed, especially mechanisms that aim to foster the compliance (such as incentives and rewards, disincentives and monitoring tools). iv) While there is a wide consensus on EC CoC principles, the language and structure of the code are considered weak. This directly affects the use of normative anchor points in the 2008 recommendation. The EC CoC is regarded as lacking the typically clear structure of a code of conduct. This seems to have impaired its understanding. According to the NanoCode survey, the code would be missing of an introduction, outlining who should be addressed and what the benefits of using the EU CoC are. With the exception of few substantial corrections needed (e.g. with regard to the accountability principle and its reference to

future generations), a (mere) new (and clearer) formulation of the code could be useful (a press release). v) Concerns about the limited scope of the EC CoC were expressed during all three consultations (in 2007 by the group of industry, in 2009/2010 by policy makers, in 2010/2011 by all groups), although these concerns apparently are in conflict with the perceived need for more specificity. This inconsistency could be overcome by repeating the (positive) experience of the EC CoC with regard to other scientific domains and other sectors of the innovation chain (i.e. manufacturing, distribution, retail and production).

Lessons for Res-AGorA

Three lessons emerge from the study of consultation processes. The first deals with the conditions of implementation of an instrument of meta-regulation, while the latter two deal with its formulation.

1. The engagement of public authorities can be deemed as the pre-requisite of a successful allocation of responsibilities. Although consultation processes can steer the phenomena of the allocation of responsibilities among stakeholders, they are per se not sufficient. As the experience of the implementation of the EC CoC in The Netherlands teaches, several soft mechanisms of implementation (such as those of incentives and rewards, disincentives) can help the compliance with the code, and thus the process of the distribution of responsibilities.

2. Processes of responsibilisation also concern the opinions that stakeholders have about what a fair distribution of tasks and responsibilities should be. The reluctance of researchers to accept the accountability principle and its reference to 'future generations' seems to be meaningfully linked with the issue of the limited scope of the EC CoC: the limitation of the code to the research domain could have negatively influenced the perception of the distribution of responsibilities, by making it seem unfair.

3. Communication turns out to be crucial. Language and structure of instruments of meta-regulation are fundamental to involve stakeholders by gaining their trust and commitment. Furthermore, communication appears crucial also with regard to normative anchor points: EU goals need to be clearly expressed within Community instruments and thus to be effectively communicated to stakeholders.

Towards Anticipatory Governance of Responsible Research and Innovation

The objective of the Res-AGorA project is to develop a comprehensive governance framework for responsible research and innovation (RRI). This will be a contribution to the EU ambition of becoming a genuine Innovation Union by 2020 striving for excellent science, a competitive industry and a better society without compromising on sustainability goals as well as ethically acceptable and socially desirable conditions.

The goal of the Rea-AGorA project will be achieved through extensive case study research about existing RRI governance across different scientific technological areas, continuous monitoring of RRI trends in 16 European countries, and constructive negotiations and deliberation between key stakeholders. This comprehensive empirical work will be the building blocks of the creation of a governance framework for RRI.

The case study summarised in this document is output of Res-AGorA's extensive empirical programme (Work Package 3).

More information at www.res-agora.eu

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