RRI Practice national workshop – the Netherlands

Location: Karel V, Utrecht, February 17th, 2017

1. Executive summary

The national RRI workshop of the Netherlands started with an extensive interchange of, and discussion on, the understandings and experiences of the participants concerning responsible forms of research and innovation. Main themes that emerged include: proactively addressing ethical and societal issues in research and innovation, focusing on opportunities, the responsibility of corporations, and both sound and engaged science. The discussion made clear that the participants have an understanding of responsibility that generally matches the rationale of RRI (Responsible Research and Innovation) quite well.

Current S&T policies and initiatives in the Netherlands were discussed. The discussion made clear that there are various initiatives that aim at increasing responsibility in science and innovation. Criticisms with respect to these initiatives include a lack of inclusiveness and a lack of a coherent and coordinated approach across these policies and initiatives. The discussion on the national policy context also indicated that there is a lot of common ground in how the participants understand current issues, actors, policies and tensions.

A main theme in the workshop was how discussions on RRI can be related to issues in the larger social-political landscape, such as exclusion, distrust, the rise of populism, and disputed expert authority. In this discussion, the importance of social inclusiveness was strongly stressed.

The discussion made clear that responsible forms of research and innovation are promoted in various ways, and that societal and ethical responsibility are high on the Dutch S&T agendas. At the same time, the concept of RRI appears to not have gained much currency in the Dutch context and is appraised somewhat critically. It was argued that RRI should not be implemented in a too strictly standardised or formalised manner.

2. Participants:

Sikko Beukema	Senior policy officer biotechnology, Department of Economic Affairs
Jan van den Biesen	VP Public R&D Programs, Philips Research
Martijn Hackmann	Director operations, Social Sciences Group, Wageningen UR
Iwan Holleman	Administrative Director of the Faculty of Science, Radboud University
David Ludwig	Postdoc, Wageningen UR
Franke van der Molen	Postdoc, Radboud University (moderator, report)
Jasper Roodenburg	Policy officer Responsible Innovation, NWO (the Netherlands Organisation for Scientific Research)
Tsjalling Swierstra	Professor of Philosophy, Maastricht University
Dick Veerman	Founder, Foodlog (critical food and innovation platform)
Bart Verheijen	Co-founder, Guruscan (knowledge management company)

3. Comments on participation:

Besides participants from the partner organisations (RU, WUR, NWO), we aimed to involve a diverse group of representatives of key NGOs and science, policy, and advisory organisations that are involved in current science and technology policies and debates. This succeeded quite well; we had a group of participants with a lot of relevant expertise and with diverse backgrounds and perspectives (policy, research, science funding, management, business, NGO). A number of the invited representatives of key policy, advisory and science organisations could not attend the workshop. Since most of them were interested though, we will involve them, along with some others, in the interviews for the national study in order to collect their input.

4. Main themes in the workshop discussion

Understandings of (ir)responsibility

We started with a short and general introduction about RRI and RRI-Practice, in which we did not provide a detailed definition or conceptualisation of RRI in terms of the policy keys or AIRR (anticipation, inclusiveness, responsiveness, reflexivity) dimensions. Thus, we left open ample conceptual and definitional space for the participants to bring their own understandings and experiences regarding responsibility to the table. Subsequently, we discussed participants' views on responsibility, ways of putting responsibility into practice, goals of responsible research and innovation, and what counts as irresponsible research and innovation. The following definitions and understandings of responsibility were mainly mentioned:

- Proactively addressing societal and ethical aspects in early stages of the innovation process. This includes integrating social and ethical considerations in innovation, involving social science in early stages, and incorporating societal concerns and demands in order to enable the societal acceptance of technology. Furthermore, the idea that innovation should follow societal concerns instead of the other way around (social pull instead of technology push) was mentioned and discussed at several moments in the workshop.
- Focusing not only on the threats, but also on the opportunities of technology. For instance, by complementing the precautionary principle with the "innovation principle" or the "sanguinity principle", i.e. not just focusing on risks but also on courage and the positive force of innovation.
- Companies taking responsibility for the future and for society. This includes taking responsibility for unforeseen effects of technology, and switching from a focus on liability and regulations to a focus on societal engagement and being responsible for the future.
- Embedding responsibility in scientific agendas and the science system. This involves adhering to principles such as independence and transparency, stimulating research integrity, addressing societal challenges in research agendas, and open access.

The notions of irresponsibility that the participants mentioned include the following:

- Purely focusing on technology without taking social aspects into account, or talking to society only after the innovation process in order to explain the virtues of technology to the public.
- Companies avoiding, externalising or shirking responsibility (e.g. "take the money and run", externalising negative impacts), or approaching responsibility in an overly formalized or rule-driven way.
- Claiming societal engagement in an empty, strategic, rhetorical way without really assuming and practicing it.
- Putting too much trust inexperts and specialist committees, thereby excluding citizens from deliberation and sense-making.
- Scientific misconduct and a lack of scientific autonomy and independence.

Responsibility in practice

The next question we discussed was how responsible forms of research and innovation are, or should be, enabled and put into practice. The first main theme that emerged was that of collaborative and participative processes between innovators and societal actors. This includes co-creating technology with future users, for instance in "living labs", and collaborating with citizens and interest groups in order to avoid unwanted consequences of technology. A second and related theme was deliberation and dialogue in order to discuss and address conflicting interests, include societal concerns and identify and address societal challenges. The third main theme that emerged concerned anticipation in order to deal with and take responsibility for the capriciousness and unforeseen effects of technologies. This requires taking into account broader socio-technical contexts, creating room for experimentation, and engaging in socially inclusive innovation processes. A fourth and final main theme focused on responsible science. Within this theme, it was argued that both curiosity-driven fundamental research, and research focusing on societal problems and challenges is needed. Furthermore, it was argued that scientists should be approachable and accountable, and that RRI requirements should be mandatory in research programmes.

Of the AIRR[1] dimensions, notably social inclusiveness came forward very prominently in this discussion. All participants argued that this is an important dimension of responsibility, and a substantial part of the discussion focused on this dimension. Furthermore, anticipation was literally mentioned and various aspects of anticipation were discussed. Responsiveness and adaptivity were not literally mentioned, but the discussion did focus on related topics, such as change, uncertainty, transitions and experimentation. Reflexivity was only mentioned after the four dimensions were introduced. Of the policy keys, societal engagement, open access, and research ethics were mentioned and thoroughly discussed.

In the workshop, we discussed various RRI-related policies and initiatives in the Netherlands. Most of these were not framed in terms of best or worst practices; they were discussed in a nuanced way, in which both strengths and weaknesses were mentioned. The examples we discussed include:

- The Socially Responsible Innovation (MVI) programme of the Netherlands Organisation for Scientific Research. This is a research funding program that aims to stimulate responsible innovation by means of collaborations between companies, societal organisations, and research organisations, in multidisciplinary projects. It has a practice- and application-oriented approach, and does not focus explicitly on the more overarching and fundamental issues concerning technology in society.
- The National Science Agenda. This is a large collaborative and participative project in which Dutch citizens were asked to formulate research questions that should be answered by science. The 12,000 questions were translated into 25 research themes that are used to prioritise and program scientific research in the Netherlands in the coming years. This initiative is strongly focused on organising social inclusion and "social pull" in science policy and funding. A point of criticism is that it focuses too much on research questions and too little on social values and concerns.
- The Topsector policy. This is an innovation policy that aims to strengthen the international competitiveness of the main industrial sectors in the Netherlands by means of government-supported private-public partnerships in innovation and research. In practice, this means that many new collaborations between companies and research institutes have been started in recent years. Points of criticism include that it "reproduces the past" by focusing on proven strengths, and that it insufficiently includes societal actors and challenges.

[1] Anticipation, Inclusion, Reflexivity, Responsiveness

One of the problems in the Dutch policy context that became clear from the discussion, is the lack of a coherent approach across these various initiatives and policies. Currently, efforts are made to address this, for instance by improving the coordination between MVI, the science agenda and the top-sector policy. From these discussions about the policy landscape, it became clear that the participants had quite a clear common understanding and framing of the main actors, policies, and debates concerning science and innovation policy in the Netherlands.

Inclusion and the broader social-polictical context

Both the importance of social inclusion and the dissatisfaction with how inclusiveness is given shape, for instance in the policies and initiatives described above, emerged as a central common theme in the workshop. This relates to an important theme of discussion in the workshop, i.e. how science and technology debates relate to current problems and developments in the larger social-political context, both nationally and internationally. Issues that were mentioned in this regard include social exclusion, disenchantment, distrust, the rise of populism, and disputed scientific and expert authority. It was suggested that discussions about RRI should take these larger social-political developments into account.

RRI in the Dutch context

The participants clearly argued that in the Dutch context, several policies and initiatives are in place to strengthen social and ethical responsibility in science and technology, and that particular dimensions and objectives of RRI are important and should be pursued (notably inclusiveness, anticipation, responsiveness, and ethics were mentioned). Moreover, many of the participants have an understanding of responsibility that matches the general rationale of RRI quite well. It was argued that the Netherlands, with its strong deliberative and corporatist tradition and its high-trust society, provides fertile ground for RRI. At the same time, the concept of RRI, in the way it is operationalised and promoted in European S&T policy, is appraised somewhat critically; it is seen as a new "label" or "fashion" and appears to not yet have gained much currency in the Dutch context. Participants recommended that RRI should not be implemented in a too strictly standardised, formalised or top-down manner; rather, RRI should be sensitive to institutional and contextual differences, for instance between academia and industry.

The participants tended to address responsibility mainly at the institutional level (companies, universities), and to a somewhat lesser extent also at the level of individual researchers. Some of the participants were particularly critical of industry and strongly argued for the increased responsibility of technology companies.

5. Reflections on the workshop process

Some of the participants were immediately enthusiastic about the workshop and were recruited quite easily. In other cases it was a bit more difficult, for instance because we had no liaison in the organisation we wanted to involve. Some of the people we invited did not respond immediately or declined the invitation (see also section 3).

We tried to involve a diverse group of participants, both in terms of institutional backgrounds and gender. Unfortunately, we failed in the latter respect, as the women we invited declined the invitation. We also invited experts in gender-related S&T issues, but none of them had the opportunity to join.

To kick off the discussion, we asked the participants to answer some questions about their understanding of and ideas about responsibility. This resulted in a lively discussion that developed and proceeded quite

naturally, with relatively limited intervention from the moderator. In the closing reflection round, the participants expressed their enthusiasm about the interesting discussion.

6. Impact and follow-up

The workshop brought together a group of experts, policy officers and other professionals, of which the majority were not yet acquainted. In the closing reflection round of the workshop, several participants expressed their enthusiasm about the diversity of the institutional backgrounds that were represented, and argued that such diverse meetings should take place more often. Several participants are interested in keeping in touch in the future, and in organising or attending follow-up activities. The latter may for instance include a follow-up workshop or follow-up activities within the organisations of participants. Several participants also said that the workshop provided them with new knowledge and ideas about responsibility in science and technology. In sum, the workshop resulted in network-building and knowledge exchange about responsible research and innovation, and may also result in follow-up meetings or activities.