OSLO AND AKERSHUS
UNIVERSITY COLLEGE
OF APPLIED SCIENCES

The Research Council of Norway

ELSA conference 2012

The Oslo Research Group on Responsible Innovation, HiOA, in cooperation with the Research Council of Norway's ELSA programme invited to a dialogue conference in Oslo, December 4th – 5th 2012.

The aim of the conference was to bring together the Norwegian ELSA community for dialogue and reflection on fundamental concepts, future orientations and strategic actions. The conference initiated a three year network programme financed by the ELSA programme. The network will from 2013 be organised by the Programme for Applied Ethics, NTNU.

TUESDAY DECEMBER 4TH, CONCEPTUAL AND STRATEGIC ISSUES

Welcome and general introductions

The conference opened with a session of posters of projects funded by the ELSA II programme, and 'Det vakre, det sanne og det gode', a film about medical imaging technology, by Merete Lie (NTNU)/Anwar Saab.

Posters:

- Picturing the brain, Aud Sissel Hoel, NTNU
- Integrating Ecotox and Ethics, Fern Wickson, Genøk
- Crossover research, Rune Nydal, NTNU
- Biotechnology in agriculture and aquaculture - effects of intellectual property rights in the food production chain, Kristin Rosendal, Fridtjof Nansens Institutt
- Genetically Modified Potato with Late Blight Resistance - Deliberate Examination of Sustainability, Ethical and Social Aspects, Anne Myhr and Frøydis Gillund, Genøk
- PatentEthics, Ellen-Marie Forsberg, HiOA

Geir Gogstad, Chair of the ELSA programme of the Research Council of Norway, and Ellen-Marie Forsberg, Senior researcher at the Oslo Research Group on Responsible Innovation, HiOA, welcomed the participants. Professor Karl Georg Høyer (1946-2012) was honored.

Please see their power point presentations in the annex.

A special edition of the journal *Genomics, Society and Policy* (edited by Hub Zwart and Ruth Chadwick) will be dedicated the conference's topics, with tentative deadline for articles in spring 2013.

Special adviser Øystein Rønning (RCN, BIOTEK2021) oriented about their experiences from integrating ELSA in large scale BIOTEK2021 projects. Please see power point presentation in the annex.

Helge Rynning (RCN, ELSA programme) presented current projects funded by the ELSA II programme, and facts and experiences from the NRC programme. Please see power point presentation in the annex.

Questions and comments

Most questions were to Øystein Rønning.

- It was clarified that in addition to a high score on the scientific component, the ELSA component needed to score medium to high, in order for a project to be funded. The volume of the ELSA component has been evaluated as significant. In comparison, for nanotech projects, the ELSA component, which should be 3-5%, is often 1-2 %.
- It was also clarified that the project groups should work closely together in the projects; interaction is the goal.
- It was commented that comparing experiences doing regular ELSA and doing integrated research will be valuable. One could learn from each other and stimulate cooperation.
- It was also held that the program should establish broader arenas to make people meet across the disciplines (natural scientists and ELSA researchers), in order to facilitate better integration in proposals to upcoming calls in BIOTEK2021. It should also be up to the researchers to create such arenas.

Plenary session – key notes

Responsible Research and Innovation (RRI), *Professor Arie Rip, University of Twente*

See also powerpoint presentation in annex.

Questions

- *RRI is launched as a cross-cutting topic in Horizon2020, but does not yet have an agreed upon definition. What is your view on its position in policy?* Rip: It is still evolving, so in the Danish conference (*Science In Dialogue*), the commissioner communicated that RRI is everywhere in H2021. I think it will be an extended impact assessment of RRI in Horizon2020. However, I don't know how they can force it. Norway is a good example, where ELSA is counted in its own rights as well as to be integrated. This is a problem in Horizon2021.

- *Neo-corporatism, how is it related to broader engagement?* Rip: The move toward participation does not help much with the new technologies because of the openness of the new technologies and the difficulties for citizens to say something about these things. Some are knowledgeable (as revealed in some focus groups), but it doesn't lead to concrete governance. So the best way might be to work with stakeholders, shaping the direction to go. Thus, I want to recognize the actual dynamics about interactions and decision-making. Broader participation is difficult, the notion of the public sphere becomes part of representative democracy, it feeds into the content. There is a threat that public participation only discusses issues that were already there for people to see. Public participation should be extended by technology evaluation.
- *Neo-corporatism, what is corporate in these models? Is it a common aim or institutional organisation?* Rip: It is not a model but observations on neoliberalism as a trend we can observe. We live in a divided society, with different corporatives. This is accompanied with narratives of containment, but instead of only saying what is bad about neo-corporatism, we could see what is positive there.

Is ELSA in identity crises? Basic ELSA, integrated projects and RRI, *Researcher Fern Wikson, Genøk/HiOA*

See powerpoint presentation in attachment. The points below spell out the content of some of the slides in more detail.

ELSA is in an identity crises. Why? ELSA has several personality disorders: multiple, dependent and fantasy prone personality disorder.

Multiple personality disorder

When did the acronym become something that makes people gather? In the human genome project ELSI (implications, not aspects) were considered. European researchers did not like this acronym, because it did not catch all the aspects.

The I/A may have several meanings. The words 'implications', 'aspects', 'impacts' or 'issues' matter because the words conceptualise a way to make a relationship and reflect different world views. 'Impacts' refers to a linear model of the relationship, but also to solutions. 'Impacts' imply that the problematic implications can be kept in a box; that you can contain and control them, and have a resolution about them.

The E can also have several meanings. E can stand for economic. Will an economics project be funded as an ELSA project? E can also stand for environment. Often ELSA is combined with HSE (health, safety and environment). It is unclear how they are fitted together. Example: Toxicology is not quite ELSA but it has some connections.

E-L-S; who is looking upon the interactions between them, or do we see them as boxed?

Dependent personality disorder

Because it is 'an ELSA of something (X)', it is also tied to the X. It is therefore dependent on 'the something'. There is a trend, particularly in Norway, toward integrated work at a programme and project level. There is excitement because there is a belief that people were on the side before, and now they become engaged. The question of the dependency disorder means that we have to sketch out the difference between *integrated* and *basic* ELSA. This latter because you need to keep a critical distance, to remain a critical voice.

The Biotek2021/Nano2021 strategy might represent both substantial and integrated ELSA strategies. Can it happen in practice? Given how the NRC works, and the fact that most are technology-guided, will there be funding for basic ELSA? In integrating ELSA we play together, in basic ELSA it is different. The ELSA Programme has more freedom to support that. The model implies that ELSA is more integrated in the future, but if it does not happen, will the problems increase?

Why is there so much focus on integrated lab projects? There is also a need to undertake integrated projects outside the lab, for instance with policy makers. How would such integrated projects be funded? This question should be addressed.

Concerning the RRI and ELSA relationship: Integration means an opportunity for attracting attention to ELSA. What is the role of ELSA researchers in RRI? Facilitate innovation or interrogate it, slow down the process? Throwing sand in the machine?

Fantasy prone personality disorder

ELSA of biotechnology, nanotechnology, synthetic biology, geo-engineering… ELSA researchers are hopping between these technologies (as funding is 'transferred' between them). The frontier pushes, ELSA tries to keep up, but it is still important to keep the focus on the technology that is not new and trendy. We need more information about impacts of the old technologies, but there is no funding because we chase the frontier. We have to see what happens all around us, and to research realities. We don't want only speculative ELSA (Alfred Nordmann); ethics on hypothetical and speculative research. We have to pool resources in what is real and important right now.

What characterizes successful ELSA in integrated projects? *Professor Hub Zwart, University of Nijmegen*

See powerpoint presentation in attachment.

Questions/comments

- *What is wrong with the ELSA acronym; what has led to this perception in the EU? Is part of it due to how it is structured, presupposing that it is problematic?* There is some room of improvement, and there could be some progress by building on experiences from ELSA. Pushing ELSA away involves a risk that you don't learn from the achievement or the problems.

- *Comment: Legal and responsible can be contradictory (ELSA vs. RRI). Maybe the L has disappeared because the technological experts fear that it may slow down the pace. Legal regulations are something external to science, looking to the regulation in the end of the innovation process. But the L should be accommodated earlier in the research; at the start of the project. One should also distinguish between regulation and the law. Regulation is part of the practice of ELSA in general, but in the Norwegian ELSA programme there were even legal practitioners on the board. However, it has been difficult to include legal issues in projects. Constructive TA is easier.*

First group session

The conference participants signed up for four groups and discussed selected topics during one hour before presenting the group discussion and its conclusions in a plenary.

Group 1: Theoretical ELSA, integrated projects and RRI: In what directions should Norway go?

- **What are the conceptual and strategic implications of the different alternatives?**

Start of discussion; what is basic and what is integrated research? What type and on what level should integration be made – at the level of people, competences or perspectives, specific topics?

How to approach the natural scientists, get them on board, get them interested, give them some benefits that they can see? It is important to achieve mutual interest and engagement (BIOTEK 2021 might be a possibility). There needs to be done something first to make people work together before a call. Six weeks' notice is too short for big projects. When and how shall we bring people together if this is what we want?

Different methods and approaches: Anthropologists are more observing than participating directly, philosophers are more interactive. Action research is one means by which we can move forward.

Conclusion

- There is a need for both basic and integrated ELSA
- Mutual interest and motivation are required to succeed in integrated projects
- We see the need for integrated ELSA projects and why this call is given, but there is a need for bringing people together in the early phase to prepare for cooperation before a call and to find the right people (BIOTEK 2021). Examples: networking events and projects; pilot projects; and workshops

The aim should be to preserve the ELSA programme with both basic and integrated projects to maintain autonomy of ELSA researchers

Group 2: Where and when should the ELSA research make a difference?

- **What is implied in integrating ELSA in other programs? What are the implications of the different approaches for the quality of ELSA research?**

It is important to articulate what ELSA researchers can offer when initiatives are launched and cooperation is invited. As a collective, we should show examples of change that has happened in research, formulate a sort of tool box showing when or where research should or could make a difference.

There should be an arena where ELSA researchers can meet, elaborate the ELSA network or to provide a meeting ground in other ways.

Flexibility or framing; there are many examples of ELSA research projects undertaken that are changed underway. Changes should be handled with flexibility and not conceived of as problems. Flexibility increases learning and should be included in the project approach. The NRC could be involved in facilitating such learning processes.

Opening up the new buzzword of innovation, what that could also mean? If ELSA is changed into RRI, what could innovation mean in that context? How to take care of the basic ELSA research if it is changed to RRI is an important question. What does it imply when ELSA researchers are not only involved in lab research but also with businesses?

It is important to have an arena that includes natural scientists. They can be the best assessors of what we are doing and can help specify needs for change, from the perspective of other disciplines.

Group 3: What is ELSA research and who are ELSA researchers?

- **How to conceptualise our core competencies and value across our internal disciplinary differences? What kinds of competencies are needed in the future?**

Three categories:

Who: the profile, the keyword in terms of interdisciplinarity and diversity, reflected in the group, different backgrounds, pre-disposed in bringing many topics into ELSA. There are a lot of silos, of coming together mainly in texts. ELSA research should come together in the beginning and throughout the process.

ELSA researchers constitute a vulnerable group, and will not necessarily find work afterwards. Conservative journals leave out ELSA perspectives.

What: Interdisciplinarity and diversity. Manipulating nature at the small scale level (nano), but there is a need to address the overarching scale of life. ELSA: in the three disciplines; fundamental critique. What needs to be added is *ontology*. Not about risks (even though present), but about epistemological challenges (knowledge-produced means). Science takes

on a certain view of nature, and the manipulation of nature is reductionist. ELSA should challenge that assumption. Not fundamentally about ethics (right or wrong), but the different views of nature. ELSA researchers have the ability to challenge the way science is carried out.

Competences: if there is a role for ELSA researchers, what talent is required? Diversity and interdisciplinarity. ELSA researchers are often generalists, bringing together different disciplines. The fact that studies are organised mostly in disciplinary silos, can lead to low interest among students for ELSA research.

The understanding of policies and practice; there is a critique that at times there is too much focus on this, such as the ability to understand different cultures, and ways to communicate. But ELSA researchers can give the critique we saw in the film and do not need to be cultural relativists. We should find the tools of leaping outside pure science. Science is neither neutral in terms of ethics nor ontology. ELSA gives an overview, but it is often not the ELSA view that has the last word.

Group 4: Law, political theory and economics

The group discussed the move from ELSA to RRI, and towards the integrative ELSA, and how they saw the trend, both in its positive and critical dimensions, and by discussing what would be the outsider view of ELSA. It is useful to see ELSA from the outside, asking how it would allow for the formulation of research questions, with legal, economic and political aspects:

- It is difficult to draw large general conclusions on small samples in integrated projects. We should also design a larger integrated ELSA project that could be a social science project going into a lot of different natural scientific projects; that is the reality we are dealing with. Resources should be made available for larger projects that study technological developments and political efforts to regulate and govern these in a whole sector (or at least larger samples that allow generalisation).
- RRI is itself part of a trend away from regulation, focusing on more voluntary instruments and soft policies, from government to governance. What is the function of RRI as a part of a politically directed trend in society? This topic includes how to study power relations, and the tendency towards increased power of multinational corporations that increasingly work outside national/domestic regulations.

In our discussions, we could certainly see the rationale for going in the direction of RRI. Due to the EU financial crises, it is understandable that they will deal more with the natural sciences, going away from regulation and critical studies of technology innovation. But it is not necessarily given that the NRC has to go in that direction.

We also discussed the differences between risk assessment and risk analysis, and how the latter provides a broader picture with more disciplines involved, and that this is more in line with how ELSA has been working. Risk assessment is perhaps more comfortable in RRI.

Working within the soft-law, the corporate social responsibility paradigm is one way of doing it; this is voluntary and defined by the corporations themselves. Hard law and regulations is

another. RRI tends to put research itself within the soft law box, hoping that the neo-corporative voluntary arrangements would be good enough (as Rip challenged us in his presentation).

We try not to be too pessimistic but we doubt that RRI would help us getting the broader view, it might rather reduce the scope of this. There is a hope that neo-corporative arrangements will be good enough, but will this be the case? Maybe ELSA researchers should study topics in a broader perspective. It should not too pessimistic either, as RRI may help broaden the view.

Other disciplines do interesting work that ELSA does as well. This creates a tension. There is an identity building among ELSA researchers which is risky.

Conclusion: we still need both basic and integrated ELSA.

WEDNESDAY DECEMBER 5TH, PRACTICAL AND ORGANISATIONAL ISSUES – THE ROAD AHEAD

Organising ELSA for optimal societal impact. How can the ELSA community collaborate in order to increase impact on science and society?

Professor Ruth Chadwick, Cardiff University and Director of Centre for Economic and Social Aspects of Genomics (CESAGen)

Please see powerpoint presentation in annex. The points below spell out the content of some of the slides in more detail:

Outline and impact: The ESRC Genomics Network (EGN) is an investment by the British Economic and Social Research Council (ESRC)**,** dedicated to examining the development and use of the science and technologies of genomics.

Examples of impact of ELSA work can be found in:

- 10 years of impact - the brochure A Fantastic Journey: 10 Years of the Genomics Network sums up what they have achieved
- The Hastings centre (40th year), 10 examples of impact made

ELSA must have a demonstrable contribution to society and the economy; an effect beyond academia. Demonstrability implies evidence that it has been used in specific audiences.

The ESCR genomics forum, Cesagen, was formed in 2002, designed to be a forum for debate between the social sciences community, natural scientists and politicians. In 2007 the second 5 year term started. In the first term, impact was not the priority (engagement was), but impact was emphasised at the 2nd stage. A network was formed in order to make an impact.

The aim of the EGN is to make unity, assisted by changing the brand, merge websites, and the annual EGN conference. The goal is to make the researchers work together in stronger collaboration, know each-other and become unified.

ESRC definition of impact: Research Councils UK (RCUK) defined research impact as "the demonstrable contribution that excellent research makes to society and the economy" – it says excellence with impact, because they want to stress that it is not a point to have impact if the research is not excellent.

Example: worst day of the year. Dr. Cliff Arnold, lectured bachelor students and used the example of Blue Monday, math calculations showing that the worst day of the year is the 4th day in January. This is an example where a great impact was made in the media, but where the 'research' was not excellent (and not meant to be, either).

Challenges to practical steps to be taken: Who actually *has* impact. In some cases, a very well-known researcher can have impact as an individual. But how to make a network or field

to have impact is more difficult. And here they are wanted to be known as a network, added value of bringing people together.

The interdisciplinarity question: is important in the ELSA field. James Ladyman, Professor of Philosophy, University of Bristol, has voiced concerns about interdisciplinarity, but interdisciplinarity could also be seen as complementarity.

ELSA has suffered from critiques from within instead of increasing the impact of ELSA field as a whole.

The applied issue: Does applied ethics rest on a mistake (Alison MacIntyre's article with this title)? MacIntyre's model presupposed that you know what the problem is, which is often what you may have to find out, thus this model misses something crucial.

Conclusion: Expectations of different parties and audiences are both positive and negative, but ELSA PR has to continue saying that everything is wonderful; that there is room for creating new tunes.

Questions/comments

- *Comparing the British and Norwegian ELSA communities and their research structure, do you see anything in the Norwegian context concerning strengths and weaknesses, do you have any advice to the Norwegian community?:* The size of the community is important. A small community can be a strength, as it is easier to make *a sense of community.* In the UK, one has the genomics network, but there are also a lot of other networks doing similar things, which implies competition etc.
- *There are many fields ELSA could be implied in, which can be very territorial.* I have worked in several fields. An interesting field was the ICT and body implants field (an increasingly important field), because the initial experience was quite different. There is less history in the ICT field in looking into ELSA issues beside privacy issues. It is difficult, but also challenging and exciting because they make you think about your own position.
- *There may be co-production dependent on the scientists, where you do your best but there is no impact.:* To create impact you have to act as a change agent. PhD and post-docs who do the studies often don't have time to take on responsibility as a change agent. There is perhaps also a need for networks to invest in communication and marketing in order increase impact. The ERCS has a communication officer. They were evaluated recently, and it was clear that the website gave a different message than desired. There are issues there about how the centre presents itself that can be important. We haven't seen ourselves as a change agent.
  The other point about coproduction: you might work with scientists but don't have an impact, in a project. ELSA as a field may have impact, but impact in individual projects can be very difficult. It is a real problem that ELSA is marginalised.
- *The critical Post ELSI Manifesto is circulated in the UK. In Norway, some believe the term ELSA has negative connotations. If we want to be truly interdisciplinary, do we want to identity ourselves as ELSA researchers?:* I do not label myself an ELSA

researcher, but calling the field ELSA is important. It is true that many people don't like to be labelled, but a *network* needs to be called something. The Post ELSI Manifesto is bad PR. There is far too much emphasis on critique instead of constructive thinking about the issues. The contest between the disciplines is an obstacle.

What should be the content and activities of a Norwegian ELSA network? An introduction to the group work and to the status of the network

Professor Bjørn Myskja, NTNU

A comment to Ruth: It is nice to aim for excellence, but it seems to be very ambitious, too 'high up'. Maybe it is fine to be settled with what is good, and do proper work and make a difference. Could this also be the aim of the network?

ELSA has a special status in Norway. I have followed the field, but never considered myself as an ELSA researcher, but as an ethicist. ELSA is a good name because it allows the inclusion of different backgrounds. We meet where it is suitable to meet, with our different perspectives on the field.

In the research field, there are various approaches. Some groups of researchers and the programme in NRC are established. They are centred on the ELSA terms, for good and bad. ELSA research is required. But who needs it? Society - and someone should discuss these aspects. It is also important to the technologists, because their developers cannot see the entire field, they need the ELSA aspect. For the philosophers like myself, we are meeting people who do empirical research, STS, and this is changing the field of philosophy.

ELSA is a weak and small field. There is a structure with centres which have basic funding, so we have research communities. People come and they build competence, but disappear. Maybe this is a reason for developing centres. Should we aim for something different here?

We need projects that are integrated in the technology, but also projects that see the larger picture. We need to strengthen the field and to make the different communities in Norway cooperate closer. We can learn from each other and position ourselves for EU projects. In order to apply for and run EU projects, one needs experience, and there is a lot of learning from talking to others.

A network is needed to assure ELSA research, also as a means to lobby towards the NRC.

The network and its meetings are also required to avoid sectarian tendencies. Pluralism is required in good work.

What is the content of the network?

Not much funding, NOK 250 000 a year. It is going to be coordinated from NTNU, the department of philosophy, that has a long history of cooperation in bio-ethics and ELSA. Hence, there is experience and competence. But what should we do?

1. Establish a webpage. Not too dynamic, not too expensive. What should the webpage contain?
    a. Firstly, it should present a competence catalogue, with names etc. of everyone in the ELSA field. In this way, as e.g. in the case of a BIOTEK call, researchers needing an ELSA partner, but don't know who to ask, could consult the webpage.
    b. Secondly, it should present news, what is happening in the ELSA field nationally and internationally. It should also be used for external information, because people don't know what we do.

The coordinator of the network should organise events, and decide how to prioritise activities. Relevant activities are seminar dissemination activities, PhD-courses and seminars (open or closed for a small community for certain purposes, such as positioning for EU proposal), as well as meetings like these. A small scale is preferable. May invite applications for small-scale activities in the community.

It should be decided whether the network will coordinate units for activities within ELSA research. It should also be decided whether the network will take initiative to activities on its own, or only receive applications for initiatives.

The network needs a name (the Norwegian ELSA network?)!

GROUP DISCUSSIONS

The content and activities of a Norwegian ELSA network were discussed in smaller, predefined and heterogeneous groups for an hour. The questions discussed were:

- What should be the objective of the network?
- Who should be involved/enrolled/mobilised? Why? And what should they contribute with?
- What do we want from the website?
- What activities should the network prioritise? Examples: seminars, PHD courses, anthologies, international activities, newsletters, input to policy, societal dialogue?

The groups should consider the first 2 years as well as the longer term.

The groups presented in random order.

Group 2

What should be the objective of the network? The network can be an asset in EU projects. Even if the project only has one Norwegian partner, this partner can involve the network in different ways, building competencies among Norwegian researchers.

The network should be a political watchdog, as ELSA research is spread out as parts of larger projects. It needs to ensure that it does not disappear parallel to gender research. Gender is a required aspect of all research programmes in the NRC, but, like gender, there is a risk that ELSA may disappear as a tick box in the proposal in the bigger projects with an ELSA component. We are also interdisciplinary, double interdisciplinary, both as a network and when working with natural scientists.

Participants in the network should lift each other up. We are competitors but we should in some ways build each other up. It is an ideal goal, but it is a good objective to think in those terms, and it would increase our individual and community strengths.

What activities should the network prioritise? A webpage is cost-effective. However, it has to be combined with personal meetings. The virtual meetings will fall apart if we don't meet in person. In the longer-term: the network could organise PhD-courses for natural scientists, maybe in combination with PhD students from the social sciences, and possibly industry.

What do we want from the website? A visualisation of the ELSA community towards natural scientists looking for such competence. It should communicate the success stories; it should be a social media platform, and it should imply open access, where everyone can write in information or news, or it could be divided between an intra-page, and a professional webpage.

Group 3

Proposed name of the network: ELSA Norway

What do we want from the website? It should be in English, and one person should be funded to run it. Our competence should be marketed, and it should clearly stress that Norway is in a unique position in Europe with regard to the volume and level of the ELSA research. The website should also present experiences on the topic; we shouldn't be shy to say that we can do this work well. To have a facebook group is a good idea.

Content: make it a more publicly friendly, give some history of ELSA. However, the presentation of the field can be difficult to agree on since it is diverse and defined in various ways. A simple description to non-experts with links to projects should be sufficient. Some links to EMBO reports or other publications should be added.

What activities should the network prioritize?
Bringing together people in the field that can work together, publish with people in other fields, make sure there is both integrated and independent research of ELSA. Facilitate people to come together, create venues through meetings, and support the maintenance of the webpage. Moneywise: 250 000 NOK per year, some of it should be used for the person maintaining the webpage. 100.000 NOK to organise meetings once a year, discuss how we would position ourselves vis-à-vis the EU. Using the network will normally support the proposal, talking about the network as a backup vocal.

Engage with NANO 2020 and BIOTEK 2021.

One larger ELSA project from the network in a proposal to the NRC?

Should the network be formalised or stay informal?

How to coordinate the funding? Make sure ELSA gets 5% of the science budget of the RCN, make people know how to share, stress that we need money to do good research in this field.

Group 1

What activities should the network prioritize?

The network should involve more people than the ELSA researchers. It should maintain openness to natural scientists and actors within industry, to have discussions of specific issues, such as how to support ELSA research. It should have panels at conferences discussing ELSA research (e.g. the STS conference in Trondheim April next year), sponsored by the network. There could be a virtual meeting prior to such events.

A coordinator will be crucial, and maybe a PhD-candidate could assist as part of his/her 'duty work'. It is important that this is a person involved in ELSA research, and this is also important for the webpage. It is important to pay someone to keep the webpage going. Otherwise, nothing will happen.

The page should contain a competence portfolio, addressing other types of scientists and potential ELSA researchers, politicians, councils, serving a marketing function. It should contain success stories, events and news. The coordinator should also be responsible for other communication tasks. The webpage is central, as a window to NRC and to other scientists. It should be in English.

Because of the limited money, larger international conferences could be used for meetings. When 5-10 people are coming from Norway, they could meet after the conference. What do we take back from the conference? The group could meet quickly, and discuss that which is relevant.

Name: NELSAN Norwegian ELSA Network. We discussed whether we should adopt RRI? But ELSA is established, and we need not necessarily to do this in Norway. It might well be a passing fashion.

The network should not forget the 'old' technologies. ELSA is more inclusive than RRI.

The first topic of the network should be to address how do other research councils assess impacts of ELSA research, and how should it be assessed? This is why there is a need the network; we should not wait for the NRC to tell us, it is a question for the researchers.

Comments by Bjørn Myskja

ELSA Norway is a favoured name.

The Nordic STS conference; everyone should know about it. The network should not be too connected to STS, it should remain something different. It is important to keep ELSA relevant, so a session at the conference is fine, but the network should be something else. STS belongs in ELSA; but we shouldn't become a sub-division of STS.

STS has chosen to be a Nordic network and not a Norwegian one. Are we interested in growing into a Nordic network? The opportunity should be open for a Nordic network, but not now.

The board will make a decision soon on the next meeting of the network. Should there be an annual meeting, and if so, what would it be? Reporting on research, how has the year gone by? Should it be a mixed form with paper presentations and some workshops about the future of the network?

Reflections from Arie Rip, informed by the Board of ELSA

The ELSA community is an artefact of the NRC (by origin). It can become a lively network in the future. An immediate conclusion is that as an artefact, it was started because of funding issues. If that disappears, or becomes less visible, the ELSA community should think about its activities and future in its own rights. Our primary concern now should be survival without the ELSA programme. So the money should be used to support the future of the network.

What the ELSA network is and how it can reproduce itself should be considered. An advice is to engage in reflexion about the reproduction of – and recruitment to - the ELSA community in Norway. We need to deal proactively with the fact that it is difficult for a Ph.D. to take an ELSA approach, and find good solutions for this.

The double interdisciplinarity is a good observation. The ELSA community needs to consider itself both as a scholarly community and a community of practice. RRI is more about meeting places than scholarly work. So if there is this move towards RRI, it should be seen as an opportunity. The ELSA network should be a scholarly community, but the interdisciplinarity should importantly mean the stimulation of meeting places with other disciplines.

A Norwegian or Nordic network/community? It is not the main thing, but the international ELSA, RRI, SiS – there is a sort of crowd of people who are involved to all times. It is an artefact of the Science in Society programme. Project funding and cooperation emanated from that, which is interesting. People here are also moving in this international direction. But there tends not to be in Norway a community of technology assessments, there is no mention of it, maybe only a few activities.

The name: Rip has no strong ideas, but Bjørn's suggestion is good, it sounds already strong. Internationally, the ELSA acronym has become less visible. In Norway, it is so much more important, so it would be a pity not to use it any more.

What might be the future of ELSA activities/research?, *Helge Rynning*

Name: ELSA is established in the national strategies, and not only in the NRC. It is therefore good to retain this name.

It is peculiar that at same time as the establishment of the ELSA network, the large-scale technology programmes ask for the integration of ELSA. The NRC will not continue the programme as it is today, because the NRC's programmes are normally much larger. But apart from that, from 2015, the NRC doesn't know what will happen. In the spring the council will come up with solutions. It is however certain that there will not be a separate ELSA programme. But the network is a good opportunity and it can possibly be funded from the NRC after 2015 as well. It is not a promise, but a possibility.

One has to learn from the process, in terms of BIOTEK 2021 and NANO 2021. The discussions must be started now, with submitted proposals for activities. It is important to have a dialogue with the ELSA community in the future. There are also some funds for meetings, conferences etc. in NRC in 2013 and 2014. The community should make an application for network meetings. What has been said at this conference is quite agreeable, and there can be a dialogue between the network and the NRC about the first proposals.

Final plenary discussions

The ELSA satellite at the NANO-mat conference in Lillehammer was a nice way to organise an event. Should we consider using other conferences to have sessions? We should also note

that the main lecture at STS conference in Trondheim is on ELSA and on risk. Lunch meetings are difficult, because there are too many events in the programme. Satellite events are better. It is a challenge to make the ELSA agenda more available in such conferences. Making the ELSA research more potent is a challenge.

Technology assessments (TA) will be included in the large, upcoming NRC programmes.

Arie Rip: We were using the slogan "Bridging the gap between innovation and ELSA" – and it made us get far. You can also say bridging the gap between ELSA and philosophy.

With regard to selling in the sub-perspectives to the technology part: could one organise a co-seminar between NANO, BIOTEK2021 and ELSA; lining up ELSA questions? [The NRC could not answer this at the meeting.]

The network should find ways to meet researchers from the technology part. Could it be an idea to make short films about the ELSA projects that are funded, and join them together, to communicate out? The success stories are crucial, you have to sell yourself very high to technology groups and programmes. It can be more useful than a conference, and a film could live on the website of the network.

We should have arenas for discussions for NANO2021 and BIOTEK2021, but they should fund it as they have more funds. An international conference on ELSA in Norway is good, since there isn't any international conference on the topic. In this way we could demonstrate the resources and competences of the Norwegian ELSA community.

The NRC stressed that there is some money for conferences and dissemination, please apply, and the board will take it up. The network has to shape their future and apply for money to NRC; but otherwise, it is up to you for the future to go on. We just wanted to shape some of the community.

The nano-future is quite bright. RRI perspectives are quite emphasised in the forthcoming calls, and there should be some opportunities to apply. A couple of calls about robust innovation will come next year. It is possible to apply for conferences in the NANO2021 programme, on an on-going basis. However, an established network is required in order to apply. Have a look at the criteria for future support for events (arrangementsstøtte).

The network should be proactive in shaping its future. The ELSA component of the BIOTEK2021 programme is fragile. It has support, yet this community needs to be consistently pushing itself forward. Be visible and full of voice.

Ellen-Marie Forsberg noted that Karl Georg Høyer would have brought up the notion of growth and de-growth. As a community, we should discuss the growth perspective (RRI as a tool for continued growth). We need to think in pragmatic terms, but should also discuss what kind of society we are actually contributing to.

She then closed the conference with thanks to all involved.