

NanoBio-RAISE Third Steering Group Meeting

6-7 November 2007,
Department of Biotechnology, Delft University of Technology,
Delft, The Netherlands

Agreed Actions & Forward Planning

DISSEMINATION

WP1: Expert working Group

- A publication in Nature (Suggested)
- An academic (briefing) paper (Agreed by Donald)
- A book (academic or popular) (Suggested)
- A documentary (Like Susan Watt BBC) (Suggested)

WP2: Horizon Scanning Workshops

- W1: A book on the first workshop proceeding is prepared to be published (Done by Johann)
- W2: No suggestions
- W3: A Paper (Suggested)

It has been suggested to write a paper on the results of the workshop.

WP3: Convergence Seminars

- Science shop discussions (already done by Marion and Sven Ove)
- Scientific paper in peer reviewed article (Agreed by Marion and Sven Ove)
- Already many Swedish journalists are interested in the results (Agreed by Marion, need help from Richard & Rebecca?)
- Send the workshop report to the institutions that have helped with the seminars (Agreed by Marion)

DEMOCS

- Publishing a report other than for the commission (Suggested by Donald)
- Playing the game again (Science Festivals, Suggested by Donald)

WP4: Courses

- Poster presentation at conferences (already done)
- Paper for a science education journal (Agreed by Daan & Susanne)

WP5: Information and Dissemination

- Four briefing papers, produced in the following order of priority:
 1. Nanobiotechnology - Donald Bruce
 2. Nanomedicine - Alfred Nordmann
 3. Nano in Food - Ineke Malsch
 4. Nanoethics - Sven Ove & Marion.

David will send the drafts of the four Briefing papers round for comments in week 46. Respondents will be given a three weeks notice so the Authors have three

weeks to finalise the paper in December. The briefing papers can be printed in January.

Based on these core papers, Richard and Rebecca will draft executive summaries for the different target groups plus press coverage letters (so we have the deliverable of 12 BP's).

- The website will be hosted under Nanomed Round Table if possible. If not, it will be maintained only as a 'passive' resource.

Overall actions for Dissemination of the project:

- EuropaBio will organise a dinner debate at the European Parliament in conjunction with Richard Hayhurst together with other project members and where politicians play the DEMOCS game organised by Donald Bruce. The Dinner debate will take place after the Briefing Papers have been finalised.
- Rebecca and Richard will organise press lunches based on the relevant research results

FINANCES

- Johann Ach will check the budget + additional costs for 2008. He agreed that the remaining budget can be transferred to other posts.
- EuropaBio's budget will be used for the work done by Rebecca for the European Parliament.
- Donald Bruce will also check his budget (make a new one) and react before Tuesday next week (13 November 2007). He wants to use some of the resources left for himself and the rest can be redistributed to other partners.
- Christoph Steinbach agreed that the money left in the budget can be spent on behalf of the consortium.

Minutes

Present:

Johann Ach, David Bennett, Donald Bruce, Marion Godman, Richard Hayhurst, George Khushf, Julian Kinderlerer, Karel Luyben (Chairman), Elly Muilman, Daan Schuurbiens, Susanne Sleenhoff, Christoph Steinbach, Johan Vanhemelrijck, Rebecca Weaver, Han de Winde

At the opening of the meeting Karel Luyben introduced the new chairman for the remaining period of the project. Han de Winde, will take over Karel's function immediately after this Steering Group Meeting.

Reporting of the Work packages:

WP1: Expert Working Group

Donald Bruce has established an Expert Work Group on Human Enhancement which has held seven meetings over the last year. The group consists of: Donald Bruce, Francois Berger, Richard Jones, Andy Miah, Alfred Nordmann, Ottilia Saxl, Elfriede Walcher-Andris and Brian Wynne.

The Expert Working Group has worked on four cases which were relevant to Human Enhancement with a focus on what people knew and what the potential is to transcend current human limitations:

- Brain Chips
- Psycho-stimulants and Cognition Enhancement
- Sport Enhancement
- Electrode Stimulation of the Brain

Donald Bruce presented the overall report to the Steering Group and asked for further comments.

Karel asked whether Human Enhancement should be seen as a switch or an incremental development.

Richard Hayhurst mentioned Joan Harris "The Super Human Species" to illustrate that the discussion is already out there.

He also mentioned the case of the South African Runner, Oscar Pistorius, the disabled runner (no legs) who wants to compete with regular runners.

As a reply Donald said Human Enhancement is a very wide area and they had to focus on a limited set of issues.

Dissemination:

Donald came up with several possibilities for dissemination:

- A possible publication in Nature
- An Academic (Briefing) Paper
- A book (Academic or popular?)
- A Susan Watt (BBC) possibility of a documentary TV programme

Johan Vanhemelrijck stressed that apart from addressing controversy it is for dissemination also very important to address positive issues. "If we only focus on the negative side we might create a problem of our own".

Donald's reply was that the issue is already out there. He also referred to Richard's comment and we don't want to forget that about the possibilities.

WP2: Horizon Scanning Workshops

Theranostics

Johann Ach reported on the third horizon scanning workshop that was jointly held with Nano2Life from 6-8 June 2007 in Münster.

One of the results of the workshop was four definitions of Theranostics; different meanings imply different ethics.

“We have to face ethical aspects that are coming out in regards to the different ideas related to theranostics.”

Johan Vanhemelrijck mentioned Yehud Shapiro from the Weissmann Institute who was also working on these issues. He also mentioned the new regulation in place for advanced therapy relating to the medical device vs. medical product question.

Dissemination:

Johann Ach suggested the following dissemination activities:

- A paper on the results of the workshops (also in respect of the first workshop)
- A book is prepared to be published with the results of the first workshop and it will probably be published at the end of the year.

Richard asked if we could use the point that nano is bringing sound diagnostics for the dissemination and public communication.

Johan Vanhemelrijck mentioned we also need to pick up on the work done for years in genetic testing → the ethical questions are very much related.

However David stressed that there is a huge gap between the work done in genetic testing and its public perceptions, and the workshops such as Johann has organised.

Donald: The point is not is this a *new* question? But what *is* the question? Nano does flag up new questions that need to be answered.

Karel: interesting issues are coming up; individual genome sequencing.

George: Although this info will need to be put against all the background knowledge that tells you something about divergence/deviation compared to other genomic knowledge.

Food and Environment

Christoph Steinbach reported on the second horizon scanning workshop that was organised by DECHEMA on Nanotechnology and food and environment from 19-20 March 2007 in Frankfurt am Mainz.

He mentioned that in preparation of the meeting it was very hard to motivate people coming from the food industry to join. They often replied like “we don’t DO any Nanotechnology”. For the environmental part there is not so much work being done up till now in that area.

He gave a small presentation with a few outlines on the result of the workshop.

Nanotechnology in general is regarded as a positive thing, but Nanotechnology in food would not be favoured.

Daan: Nanotech is optimistic unlike Biotech, but not of Nano in food. It is the food that is the problem because red and white biotech seems to be accepted as well.

Nano in food will be accepted if it feeds the hungry in the third world. But the biotechnology examples have proved otherwise.

Han: What about the labeling issue for Nano? During the Scanning workshop the participants agreed to label nano products anyway.

Christoph mentioned that at DECHEMA they are working on the development of regulation procedures for Nanotech products. They are working on definitions for what is nano and what should be tagged.

Johan Vanhemelrijck mentioned that nano food would fall under the novel food regulation and would be tested anyway. He questioned the distinction between nanobio (what is nanobio?) and nanotech in general. And he thought diagnostic devices in food, for food safety will be acceptable for the general public.

Donald referred to the wonders of Ice cream. It is all nano, and that is something you won't explain to the public, wouldn't make sense.

He also brought up the nano vs. GM debate.

Richard mentioned the food shortage discussion and with the scanning workshop results it is something we should get involved in.

Food industry must participate in the debate on nanotechnology

Dissemination:

Christoph had no ideas on how to disseminate the outcomes of the workshop. He also mentioned that it would be very hard for him as a representative of DECHEMA to disseminate the outcomes of the workshop because of DECHEMA policy interfering.

WP3: Convergence Seminars

Marion Godman reported on the convergence seminars she held last year and the report she wrote. She explained the procedure of the workshop and discussed the results. The report presents public advice for policymakers.

Dissemination:

Over the last year she and Sven-Ove Hansson gave several science shop discussions about the convergence seminars and its outcomes.

Together they are working on an article for a peer reviewed journal about the methodology.

She already has contact with journalists in Sweden who are very much interested in the outcome of the workshops.

They want to send the report to the other institutes who participated in the workshops.

The question was raised what would be the most interesting findings for a briefing paper.

DEMOCS

Donald explained the game to the group and reported the key finding after the game was played in several groups in the UK and NL.

One of the surprising results was the positive attitude of the players towards Nano medical applications.

Daan raised the question if the game was a research method or a method to raise awareness?

DEMOCS sits between the Eurobarometer and having focus groups, Numbers vs. Depth.

We need more information on: do the public really take this game up?

To what extend can we extrapolate from these groups?

Does it present an 'objective' image (The same reservation applies here as with facts) of people's values and opinions? → Are they changed by the cases through playing the game: but only momentarily.

Dissemination:

Report wise
Playing the game again
Revising the game

Richard mentioned it is a brilliant solution to get the issues out there and to educate the public.

Rebecca asked if the game could also be played online. That would be possible but would also ask a lot of changing of the game.

WP4: Courses for NanoBiotechnologists

Two courses have been held successfully in Oxford this year. Information on the evaluation was distributed amongst all the partners.

Dissemination:

Daan presented a poster at the WPE workshop that was held in Delft on the course and the teaching model.

Daan and Susanne are planning on writing an article for a science education journal

WP1/5 Management and information and dissemination

David reported on the management of the project.

The progress, subjects and status of the briefing papers was discussed.

The topics of the briefing papers (BP) are:

- A general introduction Nanobiotechnology by Donald Bruce
- Nanomedicine by Alfred Nordmann
- Nanotechnology in food by Ineke Malsch
- Nano ethics by Sven Ove Hansson

The BP on food is the most finished one. It has been send round to everyone for comments before the summer and another round will follow. For these four briefing papers the drafts are ready and David Bennett would send them round in **week 46** for comments. So the briefing paper can be finalised in January.

Rebecca commented that according to the contract we have to deliver twelve briefing papers. David Bennett explained that this was because each of the four briefing papers are adapted if necessary to the three main target audiences: politicians and policy makers, teachers and lecturers, and journalists

Dissemination

Getting it to the people to whom it matter is most important. Nature/The Sun tabloid or other newspapers like that.

Plenary discussion: dissemination in 2008

Richard Hayhurst gave a small presentation with key points and questions to the consortium for the dissemination of the project.

Target Audiences: who to target?

(Who) Geography?
EU
Core Member states
Rest of the world

Messaging: individual areas 1-2 Max
(What) General 1-2 Max
Are we going for a call to action?
What is sensible for NanoBio-RAISE as an interdisciplinary group?

Tools: News flow post or pre main launch?
(How) Exclusive articles in key journals
Radio – BBC Science friction

Timings: Messaging by January 2008 and then?
(When)

Resources: NanoBio-RAISE – NL
EuropaBio – EU
Nano2Life – Germany & France
Hayhurst Media / Marion Godmann – Scandinavia
Cambridge / Hayhurst – UK

Help needed → Spain, Italy, US, Rest of the World

Discussion:

Donald: Policymakers → not quite sure where the critical point is.

Donald: for the Expert Working Group politicians would be the most interesting target group. And he mentioned we could use the people who are already in the network for dissemination (DECHEMA, Nano2Life, Others)

Daan: Not academia

Christoph: He has a real problem with telling food industry that they are not entering into the dialogue. He also thought policymakers would be interesting as a target group. He suggested making the message to the softer so that it would be easier accepted by both groups.

Richard: Positive spin on this possible: “the public is looking into nano and its consequences for food packaging, traceability, etc”.

He also stated the public is not as worried as you think they are”.

Karel asked what is expected from the consortium contract wise. Is the contract easily fulfilled?

Johan: 1. it is good to write the messages in different formats 2. Using the research methodologies and organising a parliamentarian dinner debate, using the DEMOCS card game. We will play different stages of the game during the different courses. Invite European based journalists to this meeting as well.

Are politicians in line with the public who already played the card game?

Donald: Wanted to know if we were going to draft further briefing papers on the results of the research.

Richard and Rebecca suggested having press lunches and disseminating the information there or via a web-based initiative.

So far the discussion was on what kind of dissemination activities we could deploy. Johan tried to focus in what are the messages (content wise)?

Where product approval exists; they have to adapt legislation to incorporate nano.

Richard: We are not trying to set up an institute. We are just providing a snapshot now; and at the moment we see a few issues within the public.

David has two topics in mind for further dissemination: Human Enhancement (on the long or medium term) and nano food.

George: related to the enhancement-issue: would it be helpful to frame it in terms of NBIC convergence

For dissemination in the US: would it be nice to set up an international network on ethical issues on Nano

George would forward a list of policy researchers on Nano.

He also mentioned that the new nano ethics journal would be a great place for dissemination.

Donald also mentioned it would be good to include Canada for dissemination.

WP5 Information & Dissemination (Day 2)

Daan Schuurbiens gave a short overview of what ideas were raised for dissemination and what he and Susanne thought would be interesting for dissemination of the project.

Audiences: Policy makers
Media → Educated public

Geography: Brussels/ Europe

Tools: Dinner debate + DEMOCS → Johan + Donald
Press lunch/breakfast → Richard + Rebecca
Briefing Papers → Four in progress, 12 needed, each of 4 in 3 versions

Suggestion for 'white papers on:

1. Methodology and results of the convergence seminars
2. DEMOCS methodology/results
3. Horizon Scanning workshops 4. 5.
6. Learning from the GM debate
7. RAISE courses

Key journals would be: The Economist
BBC Radio
Columns

Attendance at conferences: ESOF
Alpha Galileo
Science Festival
CER

Donald suggested drafting a briefing paper on the Expert Working Group and its outcome. Richard mentioned the briefing papers that are already drafted, Theranostics & Genetic testing, human enhancement & NBIC convergence, Nanomedicine and Nanofood. According to him journalists are looking for a timescale and the question is whether there is one for human enhancement. David mentioned that on the article he was interviewed for on Nanofood in BBC Focus magazine in the beginning of 2007 he received no negative publicity

Rebecca asked how much resources are being put into the press.

Do we want targeted message or briefing papers?

Johan V raised the question on Responsible actions, what are they?

Up till now we have defined issues in Society and ethics. How should we look into responsible actions? If we only pick out the pain point we dig our own hole. He asked the group what actions do we think we need to do to overcome those negative points. What are the benefits of nanobiotechnology to balance the picture? Is there a list of existing products with their benefits?

The Woodrow Wilson Foundation was mentioned but also questioned on its accuracies.

There are many ways we can communicate: via paper, words or actions.

We need a checklist.

Julian suggested to make our communication wider than NanoBio. Nano will be in many things.

For the positives → food stays longer on the shelves

For the negatives → we should name them for that they do (with them as the public)

Richard: We are not selling or scaremongering any products; we have to sell this initiative as an independent group of experts to go to for information.

Johan: Before we communicate, we need a baseline of state-of-the-art.

Again the Woodrow Wilson list was mentioned but that is only web-based and not aimed at Europe

Richard; we need a European list of the current state-of-the-art. And we need to guide people through NanoBio-RAISE for information.

What are we going to do? (Question still hasn't been answered)

Do we all agree with Daan's suggestion?

Donald: there are several possibilities to combine results between different activities we carried out. Is there a possibility to communicate those?

The Briefing Papers 4 drafts will be send by David in the next few days from 7 November 2007. All respondents will be given a three weeks notice so the authors have December to finalise the BP. The Briefing papers can be printed in January 2008.

Richard and Rebecca will do a parallel exercise in November and December with drafting/creating one page summaries on different levels (Policy, general public and scientist)

So we will have the core document → 3 executive summaries and 3 press covering letters.

The priority of the Briefing papers will be (by author): Donald Bruce, Ineke Malsh, Alfred Nordmann & Sven Ove Hansson.

Marion will re-draft the BP with Sven Ove → and will report on its status soon

Website:

If possible David wants to bring the website under Nanomed Round Table (new FP7 proposal)

If that is not possible we will close down the website as a standing archive. The homepage would say the project has closed down and these are our results.

Karel: Could Donald write a BP on human enhancement. Suggestions were offered to put it onto the website. Richard suggested an article in Nature would even be better.

The dinner debate will be held after finalisation of the Briefing Papers if we agree on finances.

Donald Asked if there was money left in the budget to use for playing the DEMOCS card game on science festivals for instance. Karel replied with that it depends on the resources → who will pay? Could you get funding from the event host? Rebecca also asked in which country the game would be played and whether it would be not too much of a UK perspective and loss of focus.

Finances

The main question is if all the budget is with the right budget holder?

Johann Ach will check the budget + additional costs for 2008

He agreed that the remaining budget can be transferred to other posts.

EuropaBio the budget will be used for the work done by Rebecca

Donald Bruce will also check his budget (make a new one) and react before Tuesday next week (13 November 2007). He wants to use some of the resources left for himself and the rest can be redistributed to other partners. He wants to publish a book on the human enhancement group.

Christoph Steinbach agreed that the money left in the budget can be spent on behalf of the consortium.

What needs to be done:

- The dinner debate
- Finalising the Briefing Papers
- The final report

Johan suggested that the dinner debate could be covered by SRT (DEMOCS) and EuropaBio (Dinner).

Second Year Report to the EC

Susanne asked everyone to submit their part for the Second year report to the Commission as soon as possible (within the next few weeks, before the end of November). Questions were raised on what should be reported as you can submit just one page. The report has to be submitted to the EC by 15 December 2007.

FP7 New projects

David reported on the new proposal he put in under FP7 called **NanoMedRoundTable** and is currently under contract negotiation. All participants of the meeting received a short outline on the content of the proposal. The aim of the project is to provide high level policy advice, including for later in FP7.

Donald raised a question on if the project is going to do all the ethics again. David's reply was that that was not the case.

Karel asked why a proposal on NanoMedicine? David, That was the call, the EP specifically asked for this.

Donald reported he also put in a proposal for a new project called **pre-nanomed** together with Sven Ove Hansson as coordinator. It focuses on issues you need to think about before one moves into the nanomed applications.

Further the participants knew about **nanoHART**, a project on toxicity issues lead by Francois Berger and **the Observatory** put in by the Institute of Nanotechnology' Director, Ottilia Saxl.

In November/December the new round of calls for FP7 will be expected to come out with probably calls that are suitable for the courses.

Karel asked whether it was possible to have the courses on a self-standing basis. Daan replied that then the aim should be to target them to senior staff who could pay.

There was no other business to address

End of the meeting