



## **CEFIC invites stakeholders to nano-dialogue**

### ***Individual and collective responsibility for nanotechnology***

### ***Interview with Lena Perenius, CEFIC***

Ineke Malsch, 19 December 2008, [postbus@malsch.demon.nl](mailto:postbus@malsch.demon.nl)

Dr Lena Perenius is Executive Director Programme Product Stewardship at the European Chemical Industry Council CEFIC. CEFIC is organising stakeholder dialogue on enabling responsible innovations of nanotechnologies, in response to a call in October 2007 from Director General Robert Madelin of European Commission DG SANCO (Health and Consumer Protection) for informing public authorities, NGO's and the general public about functionality, benefits and risk related questions of nanoproducts. This stakeholder dialogue started in 2008.

**Ineke Malsch: Why does CEFIC want to organise stakeholder dialogue by itself rather than merely participating in dialogues organised by others (e.g. the European Commission dialogue on codes of conduct for nanoresearch)?**

Lena Perenius: We are also participating in the European Commission dialogue and others. We see our dialogue initiative as complementary to other ongoing dialogues. The reason why we organise our own dialogue is that as industry providing nanomaterials we would like to do that in a sustainable and safe way. We have a leading role and responsibility in this area. We think we can have an important role to play by contributing to the discussions around nanotechnology. Of course we have been challenged by stakeholders with questions of different kinds. We think stakeholder engagement is one way to respond to the questions and challenges we get.

**Ineke Malsch: What do you hope to achieve by your stakeholder dialogue?**

Lena Perenius: First of all we have to make clear that we are an industry that innovates. Of course we would like to understand the requirements of

society to the products we innovate. The scientists can't sit in an ivory tower like in the past. We think stakeholder engagement is a good way to include also stakeholders in the innovation process. But of course we want dialogue to improve understanding of what motivates stakeholders and to let them understand what knowledge we have to offer, as well as how risks are managed and shall be managed. Thirdly, we would like to achieve that by sharing information on real life products demonstrating that we take these issues very seriously. We innovate in a sustainable way. That is actually why in the stakeholder event we held last summer, we asked four companies to present the realities of products. What the nanomaterials are doing, how they behave and also how they assess the safety and what kind of risk management measures they take. I think by doing that we can add value to the dialogue by giving information. We should remember that there are also other dialogues on national level, which are organised by our national associations.

**Ineke Malsch: What do you hope to avoid?**

Lena Perenius: As I said we would like to improve understanding, so naturally we would like to make sure we avoid confusion or misunderstanding, due to situations where people make judgements based on limited information. It is a complex subject, difficult for everybody. It is a challenge to present information in such a way that stakeholders can make informed decisions and statements. We want to make it clear that our stakeholder engagement is not a sort of advertising campaign for nanomaterials or certain types of products. That is absolutely not the case. In this project we would like to define together with the stakeholders what we should do and focus the dialogue on. We carefully consult with the stakeholders from the beginning. The process and results should be transparent. We will also work with independent moderators and so on.

**Ineke Malsch: Which activities are you planning and until when is your dialogue expected to run?**

Lena Perenius: We are in the process... The result of our summer workshop is that we will now work in a more focused way. We are thinking about starting multi-stakeholder groups of 10-15 people. We should work on topics which are discussed in advance and agreed with the stakeholders. At this early stage we have some ideas. One thing could be to improve the way of sharing the information. We would like to discuss with the stakeholders questions like: What kind of information do you need? How could it be transmitted and to whom? We have many questions and comments around this. Another thing could be our Responsible Care Programme in the global chemical industry. This has existed for many years and aims at improved performance on Environment, Health and Safety. We would like to see how we can

incorporate nano-issues into this programme. That would also bring these issues to a global level.

**Ineke Malsch: Which stakeholders have already agreed to participate and which are you also inviting?**

Lena Perenius: We are planning the follow-up based on last summer's event. We have not yet formed the groups. But we are consulting as widely as possible. We would like to have consumers, trade unions, NGO's and also other groups being at the table. We would also like to have academia and regulators. We would like to have the broadest possible representation.

We have not yet reached out to the general public. We hope to work via consumers' organisations, we are making plans. This is still work in progress.

**Ineke Malsch: When will the project start?**

Lena Perenius: Early 2009, the first quarter definitely.

**Ineke Malsch: What are your criteria for a successful dialogue?**

Lena Perenius: Criteria are always interesting. You can look at them from a quantitative and a qualitative perspective. Quantitatively, we would like to have broad stakeholder coverage. Qualitatively, if we could have a win-win situation with outcomes which are really meaningful for all involved, that would be a success criterion.

Together with the stakeholders, we would like to develop some ground rules for the dialogue. We want to have mutually agreed goals, measurable outcomes and procedures which are decided upfront. If we can agree such criteria with all stakeholders, that will facilitate a successful dialogue and can be used to measure the success.

If we have well-distributed groups, is also a success criterion. Transparency is another important success criterion, to have the result of the group communicated and of course implemented. We would like to develop the criteria together with the stakeholder groups.

**Ineke Malsch: How committed are CEFIC's members in implementing the outcomes of the dialogue?**

Lena Perenius: We have discussed nanotechnology not only in the context of dialogue, but also in other activities of CEFIC. We as CEFIC and our members are committed to sustainable nanotechnology. We have also commitment at the highest level to stakeholder dialogue. The board and general assembly have agreed and committed to do it. We are making it transparent and hold ourselves to the outcome. We are not limiting ourselves to the dialogue, but we have many activities in parallel. The implementation of the outcome of the dialogue will be integrated in other

activities. We do have a high commitment to integrate it, and have a commitment from the companies at the highest level.

**Ineke Malsch: So it is not only an activity of CEFIC, but of the whole industry?**

Lena Perenius: Yes.

**Ineke Malsch: Is CEFIC planning monitoring implementation of the outcomes of the dialogue or sanctions for no-compliance?**

Lena Perenius: The monitoring is that we make it transparent and that we hold ourselves to the outcome and are working on it. You also asked about sanctions and so on, but that is not really how we work. We work with motivation of our membership. These dialogues contribute to motivation of improvements of how things are done in the companies. We work on the positive note.

**Ineke Malsch: Which societal groups or organisations does CEFIC hold responsible for the development of nanoscience and nanotechnology?**

Lena Perenius: This is a broad question to discuss the responsibility of all the different groups. In general, it is a task for the whole society. It is a mix of very different aspects. It is not only science, but also cultural, ethical and other considerations of innovation and new technologies. It is broader than nanotechnology. Today we are talking about nanotechnology, and in ten years we will be talking about something else. Every time we have more questions than answers, and there is always an element of risk. In the end it is for the whole society, and we will have to find a balance between the different groups. We have the researchers, academia, industry, regulators, opinion builders and media. We all have our different roles to play. For our part, CEFIC, we take our responsibility very seriously. We represent chemical industries who take sustainability seriously, maintaining and improving performance as a responsible industry. There must be a balance between the different groups in society, each having their own role.

**Ineke Malsch: What does CEFIC expect from governments and the European Commission in safe and responsible development of nanotechnology?**

Lena Perenius: The role of regulators is to set the basic rules which industry can and should apply. That is reflecting the acceptance of society, making clear that new technologies can be developed and the benefits can be taken by society as such, but also that it is developed in a safe way, meeting the standards of society. These are the two roles. In Europe we

expect from the European Commission that they have harmonised rules and provide a level playing field.

**Ineke Malsch: Do you also see a responsibility for trade unions?**

Lena Perenius: Yes, of course. The issue of health and safety has for many years been a tripartite activity. Trade Unions have played an important role there. They also play an important role to ensure that things are done within the limits of what society can accept.

**Ineke Malsch: Environmental movements, what do you expect from them? You invite them in your dialogue.**

Lena Perenius: Yes, we invite them because we think it is important. They represent a part of society. Green NGOs are very much opinion leaders. They get discussions going in society, which is a good thing. They have an important role of being a catalyst in discussions and in improving transparency.

**Ineke Malsch: So their contribution to the debate is most important?**

Lena Perenius: Yes, I think so.

**Ineke Malsch: Do you also expect responsibility from normal consumers?**

Lena Perenius: It is difficult to talk about consumer responsibility. Every citizen in society has a social responsibility. If we talk about development of new technology, they should try to make informed decisions. But of course it is other players that have to give them the tools and knowledge to make informed decisions.

**Ineke Malsch: So you want to take consumers seriously and give them the information they need to take their responsibility?**

Lena Perenius: Yes. We are all citizens in society and we all strive for sustainability. We would like to use new technologies and get the benefits. We all have to play our specific roles. All groups have their role to play. Consumers have the responsibility to inform themselves and make use of the available information.

**Ineke Malsch: What instruments do CEFIC and its member companies have for taking their own part in the responsible development of nanotechnology?**

Lena Perenius: We have developed a strategy for sustainable development of nanotechnology. It is based on understanding the properties and health

and environmental effects of nanotechnology and nanomaterials. We are working closely with our members, agree together on our goals and objectives and pursue them together. The stakeholder dialogue is one way, but we also work in science, for improving the knowledge. We have our own long range research initiative, where we promote projects to shed further light on different issues.

We participate in SUSCHEM, the European Technology Platform on Sustainable Chemistry. We are working closely with OECD, which is also aiming at improving methodologies. That is at a more international level, aiming at enhancing health and safety. We are working closely with the European Commission in working groups looking at the regulatory side. At the national level we are working through our national associations. Last but not least we have the stakeholder engagement.

**Ineke Malsch: If you look at your member companies, there are very large chemical companies, but also small and medium size companies. Do you see a specific role for SMEs? They may not have the same budget or instruments as large companies for responsible nanotechnology development?**

Lena Perenius: That is exactly why members of trade associations like CEFIC and at national level try to disseminate best practices, knowledge etc, also to SMEs.

**Ineke Malsch: Yes, but knowledge may not be enough. If you have to handle nanomaterials in a contained way, this requires good infrastructure on the ground, good laboratories and practices.**

Lena Perenius: Yes, but in trade associations like ours, big and small companies are getting together and the big companies share know how on health and safety assessment. This is a type of capacity building, by promoting best practices. You mention laboratories, but that is not the biggest hurdle. The biggest hurdle is to bring up the knowledge and to promote good practices which are developed in big companies and spread through trade organisations.

**Ineke Malsch: Is spreading best practices developed enough?**

Lena Perenius: We are working on continuous improvement. That is the motto of our Responsible Care Programme. We try to do that all the time, especially with new technologies. We have to work hard and be prepared to look at new issues when they arrive.

**Ineke Malsch: What is or could be the role of the EU code of conduct for nanotechnology research (or codes of conduct in general) in your view? Why?**

Lena Perenius: The code of conduct could be useful. It motivates voluntary responsible behaviour, while leaving some freedom to find the best solutions in particular cases. They are good in motivating and encouraging good research in this area.

**Ineke Malsch: Do you think it is enough or is there a need for European regulation?**

Lena Perenius: It is already regulated. I am sure you are aware of REACH, the overall regulation for chemicals. There are ongoing discussions on how nanomaterials can best be dealt with by REACH. It is fully clear that it covers nanomaterials, and we are currently discussing how best to implement REACH for nanomaterials. In Europe we have a very comprehensive set of rules for chemicals and nanomaterials are covered by that.

**Ineke Malsch: Should there be more measures except voluntary codes and regulations?**

Lena Perenius: I think they are good complements to each other. These are the two main cornerstones. As it is a new technology, it is important that we keep discussions going and stimulate transparency. We should give information to consumers to enable them to take good decisions.

**Ineke Malsch: How can distributed responsibility be made to work, avoiding “organized irresponsibility” (Arie Rip, University of Twente)?**

Lena Perenius: I agree with him that every actor has to do what he or she has to do to stimulate sustainable development. There is a mix of legislation and non-legal guidance and dialogue. We have to live with that. There can't be an overarching dictatorship organising everything in detail when we are dealing with new technology. We can't accept the anarchy of an animal farm either. We have to strike the right balance, as we have to do in all other areas of life. It is not different when we are developing new technologies. We have to play our own roles as consciously as possible.

**Ineke Malsch: So even though it is not perfect, you think the system is robust enough for responsible development of nanotechnology?**

Lena Perenius: Yes, I think so. In this particular case, we have a very comprehensive regulation for Chemicals in Europe; we have a good chance to do it in an appropriate way.

**Ineke Malsch: So REACH is the main regulatory framework?**

Lena Perenius: Yes.

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Role in debate on nano-technology, ethics and society:	<p>CEFIC is organising stakeholder dialogue on enabling responsible innovations of nanotechnologies, in response to a call in October 2007 from Director General Robert Madelin of European Commission DG SANCO (Health and Consumer Protection) for informing public authorities, NGO's and the general public about functionality, benefits and risk related questions of nanoproducts. CEFIC has identified two topics for dialogue: nano-coatings (with the highest number of consumer-relevant products) and environmental technologies incorporating nanotechnology (with the highest potential for the future to solve challenges like energy efficiency and renewable energies). Cosmetics and food are also considered topics for debate, but other industry associations are in a better position to take the initiative: COLIPA for cosmetics and CIAA for food. In 2009, CEFIC wants to carry out stakeholder participative projects on nanotechnologies stimulating the European Chemical Industry to research, develop and market nano-enabled products in a socially responsible and environmentally sustainable manner. (CEFIC: Enabling Responsible Innovations of Nanotechnologies; Stakeholder Engagement Workshop, Brussels, 24 June 2008, workshop documentation, 2008)</p>

### Relevant recent publications of CEFIC

CEFIC: Enabling Responsible Innovations of Nanotechnologies; Stakeholder Engagement Workshop, Brussels, 24 June 2008, workshop documentation, 2008,

<http://www.cefic.org/Templates/shwStory.asp?NID=577&HID=582&PHID=577>

### About ObservatoryNano

The observatoryNANO project is funded under FP7 for four years from April 1<sup>st</sup> 2008. Its primary aim is to support European decision-makers with information and analysis on developments in nanoscience and nanotechnology (N&N). It will collate and analyse data regarding scientific and technological (ST) trends (including peer-reviewed publications, patents, roadmaps, and published company data) and economic realities

and expectations (including market analysis and economic performance, public and private funding strategies). The ST and economic analysis will be further supported by assessment of ethical and societal aspects, impacts on environment, health and safety, as well as developments in regulation and standardisation. Although much of this work will be performed within the consortium, the project is working cooperatively with other initiatives to ensure that effort is not duplicated and that resource sharing and output are maximised. To date liaisons have been established with international organisations including the EPO, OECD, and ISO, and will continue to be established with other relevant organisations such as European Technology Platforms (ETPs), ERA NETs, and other EU-funded projects.

The observatoryNANO project is led by the Institute of Nanotechnology (IoN) (UK), and includes: VDI Technologiezentrum (DE), Commissariat à l'énergie atomique (CEA) (FR), Institute of Occupational Medicine (IOM) (UK), Malsch TechnoValuation (MTV) (NL), triple innova (DE), Spinverse (FI), Bax and Willems Consulting Venturing (B&W) (ES), Dutch National Institute for Public Health and the Environment (RIVM) (NL), Technical University of Darmstadt (TUD) (DE), Associazione Italiana per la Ricerca Industriale (AIRI) (IT), Nano and Micro Technology Consulting (NMTC) (DE), Swiss Federal Laboratories for Materials Testing and Research (EMPA) (CH), University of Aarhus (DK), MERIT - Universiteit Maastricht (NL), Technology Centre AS CR (CR).

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