

BELGIUM

In November 2006 and April 2007, Belgium submitted a report on work completed, underway and planned (it was included in the compilation on the OECD public website). The highlights here are for actions between April 2007 and November 2007.

Highlight of developments since the 2nd meeting of the WPMN

- Launched a national call for tenders for a geno/eco/tox study of nanopolymers
- BE researchers now involved also in SG3 and SG6 of WPMN
- BE acquired a new electronic microscope useful also for nanomaterials characterisation
- Discussions between nanotechnologists, natural and social scientists, stakeholders, and citizens

Work completed, underway or planned

1. Any national regulatory developments on human health and environmental safety including recommendations or discussions related to adapting existing regulatory systems or the drafting of laws/ regulations/ guidance materials

At present there is no regulation specifically addressing nanomaterials in Belgium.

In Belgium, the Public Federal Service (Ministry) for Health, Safety of the Food Chain and Environment will be the leading competent authority to assess and manage risks in connection with handling and use of nanomaterials and this according to the existing regulations. However, currently no legislation activities are undergone to address it specifically as there is no definition of the nanomaterial in place under the current legislation framework. The point was raised several times during the ongoing negotiation of the REACH proposal and Belgium is waiting for further initiative to be taken at EC level.

The interface 'environment and health' has already considered the nanotechnology as a potential action point for the upcoming yearly work programmes.

2. Developments related to voluntary or stewardship schemes

At present, very little information is available about the presence of nanomaterials on the Belgian market. Therefore, it is envisaged to carry out a "market" survey by convening the related sector (from R&D to manufacturers and down stream users). Those stakeholders will be invited to participate in declaring the purpose/extent/concerns of their current research and development of products/articles.

3. Information on any risk assessment decisions

No risk assessment on specific nanomaterials has been conducted in Belgium and no risk assessment decisions have been taken.

4. Information on any developments related to good practice documents

In Belgium we would like first to collect this information during the survey planned and thereafter develop good practice documents based on best available practice, as more specific knowledge concerning nanomaterials and situations for guidance-request are first needed.

5. Research programmes or strategies designed to address human health and/ or environmental safety aspects of nanomaterials

An ad-hoc nanomaterials working group has been established by the Belgian Ministry of Health, Food Safety and Environment, with a first meeting in February 2007. Group members are presently scientists from universities and public research centers, and representatives of CA. In the future this group will possibly be integrated to the framework of the Belgian Cooperation Agreement Act for Environmental policy. This group is informed in first instance about developments at international level (e.g. OECD). As a second goal, collection of scientific information would allow the Belgian CA to decide how to best answer the potential safety concerns linked to the production and use of nanomaterials for human health and the environment. Contacts between researchers in nanomaterials safety in Belgium are promoted by this group.

Belgian researchers are now involved in OECD SG1 and SG2, SG3 and SG6; a draft listing of Belgian research on nanomaterials toxicology has started; WPNM is now known by researchers in Belgium; Research priorities are currently being identified.

During the 2nd meeting of the Belgian nanomaterials working group, current Belgian research projects descriptions were collected:

Institution	Title	Financing	Duration	Partners & Contact
Katholieke Universiteit Leuven, Department of Public Health	Physico-chemical determinants of toxicity: A rational approach towards safer nanostructured materials	Belspo: CONTRACT NR SD/HE/02A	01/01/2007 – 31/12/2010	UCL - KUL – VUB P. Hoet, B. Nemery
Idem	Safe production and use of nanomaterials	EU IP; Nanosafe2: Contract no 515843-2	01/04/2005 – 31/03/2009	24 partners P. Hoet, B. Nemery
Idem	Nanotechnology Capacity Building NGOs	EU NANOCAP: Contract no 036754		16 partners P. Hoet, B. Nemery
Idem	Improving the understanding of the impact of nanoparticles on human health and the environment	EU Impart: Contract no:013968I	01/02/2005 – 31/01/2008.	20 partners P. Hoet, B. Nemery
Idem	Mechanisms of lung and cardiovascular effects of air pollution particles	FWO Vlaanderen G.0165.03N	01/01/03 – 31/12/07	P. Hoet, B. Nemery
Idem	Particles translocation through the lung epithelium: development and use of an in-vitro model	FWO Vlaanderen G.0169.04	01/01/04 – 31/12/07	P. Hoet, B. Nemery

University of Namur	Nanotoxicology : evaluation of the potential toxicity of nanoparticles of interest to the industry (in vitro, in vivo, physical characterisation, chemical modifications, communication)	Région Wallonne and University of Namur	5 Years	O. Toussaint
Scientific Institute for Public Health	Optimization and adaptation of an in vitro strategy for the assessment of human toxicity of nanoparticles	Scientific Institute for Public Health	3 years project , Started in Nov-2006	P. Troisfontaines

Ecotoxicology is not currently addressed by those projects (while human toxicology is well represented), so the Belgian Ministry of Health, food safety and environment is considering the feasibility of funding a research project in that field.

A small budget national tender as been launched by the Belgian Ministry of Health, food safety and environment in november 2007 for a study of the toxicity, ecotoxicity, and genotoxicity of nanopolymers used in the biomedical domain for genetic applications.

The VAR (Veterinary and agrochemical research center), part of the Belgian Ministry of Health, acquired a new electronic microscope, which has been tested for nanomaterials characterization. This instrument is potentially useful for the characterizations planed by WPMN/SG3.

6. Information on any public/ stakeholder consultation

The working group referred to in point 1 will be extended to the stakeholders including NGOs and industrial federations.

The following research project includes public consultation: *Nanotechnologies for Tomorrow's Society (NanoSoc) brings together nanotechnologists, natural and social scientists, stakeholders, and citizens in the region of Flanders, Belgium, to discuss and reflect on the opportunities and challenges involved in the constructive social shaping of nanotechnologies in three particular fields of application: smart environment, bio on chip, and new materials. The research project is funded by the Flemish Region Government.*