ResponsibleNanoCode

The Responsible Nano Code – Update May 2008

The Working Group of the Responsible Nano Code has finalised the *Seven Principles of the Code* for Responsible Nanotechnology and a series of *Examples of Good Practice.* These *Examples* will be the starting point for a more detailed *Benchmarking Framework,* which will be developed over the next 5 months and used subsequently to independently assess the extent to which organisations involved in the research, production, retail and disposal of products using nanotechnologies are operating according to the Code.

The Responsible Nano Code will therefore work in two ways:

1. Organisations will be encouraged to adopt the Seven Principles of the Responsible Nano Code. They can also refer to the Examples of Good Practice that provide suggestions as to how each Principle might be implemented. In addition, the benchmarking process will be designed to assess the extent to which they are achieving best practice and to help them continuously improve.

2. A group of organisations (to be determined) involved in nanotechnology will, in 2009, and possibly thereafter, be benchmarked to assess the extent to which they are operating according to this Framework; this may include both companies that adopt ***and don't adopt the Code.*** The intention is for this benchmarking process to be undertaken by an independent group of stakeholders (to be defined).

The Code and the benchmarking process are intended to stimulate these organisations to consider and continuously improve all aspects of their involvement with nanotechnologies - including governance, risk assessment, broader social and ethical issues and to take into account the views of their stakeholders.

Following the agreement of the Seven Principles of the Code and the Examples of Good Practice on May 13th 2008, the Working Group convened a Benchmarking Sub Group, led by Rachel Crossley of Insight Investment, to develop the detailed criteria and further define the benchmarking process.

This Sub Group intends to complete its work by the end of September 2008, at which point the Code and Benchmarking Framework will be formally launched, and the independent group who will undertake the benchmarking process identified. Organisations are encouraged to adopt the Code from now on; we expect that the first Benchmarking process will take place in 2009.

See below the Seven Principles of the Responsible Nano Code and the Examples of Good Practice.

For a full explanation of the process through which the Code was developed attached is a further document *"Information on the Responsible Nano Code Initiative".* These documents, together with the Record of Deliberations for the Working Group meetings and other details can be found on the website www.responsiblennanocode.org.

For further information on the Responsible Nano Code, please contact Hilary Sutcliffe at Responsible Futures on 0208 693 0053 or email hilary@responsiblefutures.com

The Seven Principles of the Responsible Nano Code

These seven Principles form the basis of the Responsible Nano Code. As the Code is designed for adoption by organisations involved in the research, development, manufacturing, retailing, disposal and recycling of products using nanotechnologies, it is likely that some Principles may have more relevance to certain organisations than others.

Principle One – Board Accountability

Each organisation shall ensure that accountability for guiding and managing its involvement with nanotechnologies resides with the Board or is delegated to an appropriate senior executive or committee.

Principle Two – Stakeholder Involvement

Each organisation shall identify its nanotechnology stakeholders, proactively engage with them and be responsive to their views.

Principle Three – Worker Health & Safety

Each organisation shall ensure high standards of occupational health and safety for its workers handling nano-materials and nano-enabled products. It shall also consider occupational health and safety issues for workers at other stages of the product lifecycle.

Principle Four – Public Health, Safety & Environmental Risks

Each Organisation shall carry out thorough risk assessments and minimise any potential public health, safety or environmental risks relating to its products using nanotechnologies. It shall also consider the public health, safety and environmental risks throughout the product lifecycle.

Principle Five – Wider Social, Environmental, Health and Ethical Implications and Impacts

Each organisation shall consider and contribute to addressing the wider social, environmental, health and ethical implications and impacts of their involvement with nanotechnologies.

Principle Six – Engaging with Business Partners

Each organisation shall engage proactively, openly and co-operatively with business partners to encourage and stimulate their adoption of the Code.

Principle Seven – Transparency and Disclosure

Each organisation shall be open and transparent about its involvement with and management of nanotechnologies and report regularly and clearly on how it implements the Responsible Nano Code

Examples of Good Practice

These examples will form the basis for the more detailed *Benchmarking Framework* which will then be used to evaluate companies, whether or not they have adopted the Code.

Principle One – Board Accountability

Each organisation shall ensure that accountability for guiding and managing its involvement with nanotechnologies resides with the Board or is delegated to an appropriate senior executive or committee.

Examples of how the organisation can demonstrate implementation of the Code may include:

1. Assigning accountability for nanotechnology, and for the implementation of the Code, to the Board or by the Board to an appropriate senior level executive or committee.

2. Clearly articulating how responsibility for nanotechnologies, and for implementation of the Code, is assigned within the organisation.

3. Publishing its commitment to the responsible management of its involvement with nanotechnologies. This is likely to include, among other things, commitments to:
   a) understand, assess and mitigate any health, safety, environmental, social or ethical issues associated with the company's involvement with nanotechnologies
   b) elicit, consider and take account of stakeholders' concerns
   c) support the development of effective regulatory frameworks, and be responsible, transparent and consistent in its external statements and public policy lobbying
   d) undertake continuous improvement in its management of nanotechnologies
   e) be transparent and disclose the organisation's involvement with nanotechnologies

4. Explicitly incorporate consideration of nanotechnology-related opportunities and risks into its regular strategic business risk assessments.

5. Establish or adapt and publicise, mechanisms through which staff or external stakeholders may bring concerns to the Board or governing body relating to any social, ethical, environmental, health or safety issues relevant to its involvement with nanotechnologies.

Principle Two – Stakeholder Involvement

Each organisation shall identify its nanotechnology stakeholders, proactively engage with them and be responsive to their views.

Examples of how the organisation can implement the Code may include:

1. Identifying and take the initiative to engage with stakeholders – including those whose views they may not agree with. Examples of stakeholder groups are employees, customers (business-to-business and end-consumers), shareholders, suppliers, non-governmental organisations (NGOs), civil society organisations, academics, consumer bodies, trade unions, national governments, international governing bodies and the general public.

   Engagement may take the form of contributions to programmes run by other organisations, or the organisation's own initiatives, for example, individual meetings with stakeholder groups, supplier engagement and training, stakeholder panels, consultations, or web forums.

2. Identifying, considering and responding, as appropriate, to the concerns of stakeholders (including those that the organisation has no direct contact with, but whose concerns the organisation may be able to play a part in addressing). This will be particularly appropriate for applications where potential environmental and human health and safety issues are involved.

3. Demonstrating how stakeholder views have been considered and taken into account, or explaining why they have not, if it is felt they are not appropriate.

Principle Three – Worker Health & Safety

Each organisation shall ensure high standards of occupational health and safety for its workers handling nano-materials and nano-enabled products. It shall also consider occupational health and safety issues for workers at other stages of the product lifecycle.

Examples of how the organisation can implement the Code may include:

1. Developing or revising policies, procedures and tests that provide high standards of protection for those working in the development, manufacture, distribution, use, disposal and recycling of nanomaterials and nano-enabled products. In particular, there shall be no default assumption that the risks associated with nanotechnology are the same as those involved with existing materials at a larger scale.

2. Disclosing publicly the relevant standards and protocols that it uses and the steps it has taken which are specific to its use of nanomaterials.

3. Providing appropriate information on the inclusion of engineered nanoparticles, and their safe handling, to onward users of nano-materials or nano-enabled products throughout the product lifecycle.

4. Disclosing any breaches of safety guidelines or regulations relating to workers, their impact, and the actions taken in response, to the relevant authorities.

5. Sharing information and good practice on worker safety through appropriate forums – eg trade associations, unions, think tanks and government initiatives.

Principle Four – Public Health, Safety & Environmental Risks

Each organisation shall carry out thorough risk assessments and minimise any potential public health, safety or environmental risks relating to its products using nanotechnologies. It shall also consider the public health, safety and environmental risks throughout the product lifecycle.

Examples of how the organisation can implement the Code may include:

1. Putting processes in place to identify, evaluate and minimise any risks to the general public, users or the environment from the development, manufacture, distribution, use, disposal or recycling of nano-materials or nano-enabled products. In particular, there shall be no default assumption that the risks associated with nanotechnology are the same as those involved with existing materials at a larger scale.

2. Highlighting to other appropriate organisations in the supply chain any risks that they might need to address.

3. Disclosing publicly the standards and protocols it has used to assess product safety and the actions it has taken in the absence of appropriate standards, protocols or relevant legislation.

4. Disclosing how it identifies, assesses, manages and mitigates any public health, safety and environmental risks identified as relating to its products.

5. Marketing products only after ensuring that the safety of the nanotechnology enabled elements of the products have been substantiated.

6. Sharing information on risk assessment and mitigation methodologies, and assessment results, with government agencies, regulators and other organisations in order to enhance global understanding and the development of appropriate risk assessment methodologies.

7. Contributing constructively to the development of appropriate regulations and standards in all markets. Proactively support government and independent research initiatives to bridge information or research gaps that hinder the responsible development of nanotechnologies.

Principle Five – Wider Social, Environmental, Health and Ethical Implications and Impacts

Each organisation shall consider and contribute to addressing the wider social, environmental, health and ethical implications and impacts of their involvement with nanotechnologies.

NB: *The many potential applications and uses of nanotechnology can have wider social, environmental, health and ethical impacts. The responsibility to consider and address these lies with all stakeholders, including companies, governments, shareholders, NGOs, consumer groups, academics, business associations, media and the general public. The aim of this principle is to stimulate companies to consider what part they may play and how they may engage with others to develop appropriate responses to these important issues.*

Examples of how the organisation can implement the Code may include:

1. Taking steps to understand the wider social, environmental, health and ethical implications and impacts of its involvement with nanotechnologies and its potential contribution to developing solutions.

2. Becoming involved in research, collaborative initiatives, partnerships and community or charitable projects that help to develop an understanding of, and address issues arising from, its involvement with nanotechnologies.

3. Disclosing the results of any assessments it undertakes on the social, environmental, health and ethical issues relating to nanotechnology, and the activities it undertakes in response.

Principle Six – Engaging with Business Partners

Each organisation shall engage proactively, openly and co-operatively with business partners to encourage and stimulate their adoption of the Code.

Examples of how the organisation can implement the Code may include:

1. Engaging co-operatively and proactively with its business partners (including suppliers, customers and commercial partnerships) to encourage them to adopt the Code.

2. Communicating to suppliers or commercial partners its policies and required standards of behaviour relating to the development and use of nanotechnologies.

3. Providing appropriate information and guidance for customers and onward users on the safe processing, usage, transportation, storage, disposal or recycling of its nano-enabled materials or products.

4. Ensuring that it can identify and trace products using nanotechnologies in its supply chain.

Principle Seven – Transparency and Disclosure

Each organisation shall be open and transparent about its involvement with and management of nanotechnologies and report regularly and clearly on how it implements the Responsible Nano Code

NB: Transparency and disclosure is at the heart of all the principles in the Responsible Nano Code and shall be a core element of each organisation's approach to implementing its Code commitments.

Examples of how the organisation can implement the Code may include:

1. Take a proactive approach to communicating with all stakeholders on its involvement and use of nanotechnologies. This may be achieved through its website, annual reports, corporate responsibility report or similar, in appropriate printed materials, through participation in voluntary public disclosure schemes, public product databases, product labelling, seminars, conferences etc.

2. Communicate, at least annually ideally, with stakeholders (including shareholders), on its adherence to the Code. This should cover both its involvement in, and management of nanotechnologies. Where principles are not relevant or have not been adhered to, the reasons will be explained.

3. Use the term 'nano' appropriately when promoting nanotechnology-enabled products – ie not using the term 'nano' where the product is not nano-enabled, but also not deliberately hiding the use of nanomaterials.

4. Substantiate product effectiveness claims with sound and specific scientific research and makes this available to stakeholders.

5. Adopt a policy or adapt an existing policy to specify its approach to sales, advertising, public relations and promotion of products using nanotechnologies

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