ResponsibleNanoCode

Terms of Reference:

Initiative to develop a Responsible Nanotechnologies Code for Business

Objectives and scope of the Code

This initiative aims to develop a voluntary, principles-based Code ('Responsible NanoCode' or 'Code') that may be adopted by businesses involved in developing, manufacturing and retailing products using nanotechnologies.

The Code will be designed to establish a consensus of what constitutes good practice in businesses across the nanotechnology value chain (i.e. from research and development to manufacturing, distribution and retailing) so that businesses can align their processes with emerging good practice and form the foundation for the development of indicators of compliance.

The Code will be a voluntary Code. Like other principles-based codes, it will illustrate expected behaviours and processes, not standards of performance. Indicators of compliance could be developed at a later stage. The Code is not intended, however, to be an auditable standard, it will not detail levels of performance expected of companies, nor will it give guidance on definitions, characterisation, measurement etc.

It is not intended that this Code supersedes or replaces the development of future legislation and regulation for nanotechnologies; however, given the absence of comprehensive appropriate legislation at present, it aims to provide clear guidance about the expected behaviour of companies in relation to their nanotechnology activities. It is hoped that the Code and the process of its development might assist with the evolution of such legislation by clarifying the principles which may underpin more detailed, verifiable, standards.

Companies will be encouraged to demonstrate their adherence to the principles of the Code on a 'comply or explain' basis. Codes adopting this approach lay down rules or guidance and companies are encouraged to publicly explain how they either comply with them or why they do not, usually through statements in their annual or social reports.

It is the intention to develop a Code which has relevance internationally. The Working Group for the initiative, however, will comprise mainly organisations based in Europe or European representatives of US or non-European organisations, for practical reasons. Through an international consultation process, we aim to provide the opportunity for many representative organisations and individuals worldwide to comment and input to the Code.

Background

In November 2006, The Royal Society, Insight Investment and the Nanotechnology Industries Association, worked in partnership to organise a workshop to engage businesses in discussion on the technical, social and commercial uncertainties relating to nanotechnologies. Following the success of the workshop, they agreed to take forward one of the key recommendations that emerged from the discussions: the development of a voluntary Code for businesses involved in nanotechnologies.

(See www.responsiblenanocode.org for the workshop report and supporting paper prepared for the workshop *An Uncertain Business: the technical, social and commercial challenges presented by nanotechnology*).

The three organisations were joined by the Nanotechnology Knowledge Transfer Network – an initiative sponsored by the UK government's Department of Trade and Industry. These four organisations are now referred to as the 'Founding Partners'. (See Appendix 1 for details on each organisation)

Funding
When considering funding, the Founding Partners sought to achieve a balance of funding sources and ensure independence from business and other specific influences. It was therefore agreed that three organisations, The Royal Society, Insight Investment and the Nanotechnology Knowledge Transfer Network would fund the initiative.

The Founding Partners then approached Lord (John) Selborne to Chair the Working Group (see Appendix 1) and appointed an independent organisation, Responsible Futures, as the Secretariat to the initiative (See Appendix 1).

Participants and their roles

Working Group Members
In creating the Working Group to develop this Code, the Founding Partners sought to involve experts from a range of stakeholders, including representatives from businesses, non-governmental organisations and academics. The Working Group members were selected to try to achieve representation from diverse business areas in which nanotechnologies are being developed or applied, whilst maintaining a group size that is able to develop a workable Code in a realistic, though ambitious, timeframe. (See Appendix 2 for a list of Working Group members)

In addition, a small number of non-governmental organisations are currently involved in the area, some of whom had to decline an invitation to joint the Working Group, because of conflict with their campaigning objectives. In order to ensure that the perspectives of these and other non-business organisations are reflected in the content of the Code and final report, the Working Group will seek to actively engage with all those whose perspective is important to the drafting and ultimately adoption of the Code. This engagement will be conducted in the form of an open public consultation on the draft Code, during which all comments from organisations and individuals are welcome, while others will be targeted directly to seek particular feedback.

Role of the Chair
The Chair will facilitate an appropriate strategic direction for the group; he will oversee process efficiency and integrity, and ensure that all participants' perspectives are heard and appropriately reflected in the outcome. He will supervise the adoption of good governance principles, act as a focus for conflict resolution and ensure there is an appropriate voice for all participants in the consultation process.

It is the earnest desire of the Chair and Founding partners that this process will create a consensus view of the content of the Code and the report.

Role of the Founding Partners – the Royal Society, Insight Investment, the NIA & Nanotech KTN
The role of the Founding Partners was primarily to initiate the development of the process and its funding. In addition it convened the Working Group and appointed the Chair and Secretariat. Going forward, the Founding Partners will also participate in the Working Group and will continue to ensure that the Code development process runs smoothly. It will also ensure that the Secretariat delivers on the objectives and timetables agreed.

Role of the Working Group
The role of the Working Group is to define the direction and content of the Code and final report. It will direct the Secretariat and approve the work plan, draft Code, consultation strategy and process, the final draft of the Code and accompanying report.

All Working Group participants are encouraged to engage in the process in a constructive and open way and are free to leave the initiative at any time.

Individuals and organisations participating in the Working Group are not required to publicly endorse or subscribe to the Code once it is complete as a condition of their participation.

Role of Secretariat
The Secretariat will assist in the facilitation of the process; provide support to the Chair and the Founding Partners; support the work and meetings of the Working Group; help draft the Code and provide additional timely and appropriate support materials to participants.

It will provide a central point of contact for Working Group members and consultees, and conduct the consultation exercise in an impartial, inclusive manner. The Secretariat will ensure the transparency and accountability of the process and help facilitate effective communication and involvement of all participants.

Procedures

Confidentiality
In order to preserve confidentiality and allow participants to express themselves freely as part of this process we propose that, whilst members of the group may speak about their involvement to external audiences and the themes discussed, they may not quote individuals or organisations by name, or reference sectors – eg 'a business person said…' an academic suggested…'.

Participants are encouraged to consult within their own organisations during the process to inform their own thinking and to feedback pertinent information to the group.

The Development Process
The Working Group will be the main driver of the development process by drafting of the Code, according to discussion consensus. It is anticipated that the Secretariat will support much of the development work by assisting with drafting the documents that articulate the discussion and opinion of the working group.

The Working Group will share observations with all participants both by email and through meetings. The Secretariat will subsequently amend the texts accordingly through the approval process described above.

A record of the deliberations of the Working Group will be prepared within 5 days of the meeting and will be circulated for approval to the full Group within 3 weeks of the meeting before being published on the website.

Areas of work
The Code development process comprises three areas of work:

- Drafting and agreeing an initial Code
- An open international consultation and engagement process
- Integrating the findings of the consultation into the final Code

A draft Work Plan is attached, outlining a proposed development process, which will be finalised by the Working Group in its early meetings. (See Appendix 3)

Timeframe
A timeframe of around 7-8 months has currently been suggested as reasonable to develop the Code in this way. The process will begin in June 2007 and finish around February 2008.

The Consultation
The draft Code, agreed by the Working Group, will be used as the basis for a wider consultation. This will comprise some face-to-face and telephone interviews, focused around specific invitations to international organisations and an open call for comment. This process will be conducted by the Secretariat

The initiative aims to include in the consultation a range organisations involved with nanotechnology including businesses, non-governmental organisations, academic institutions, trade bodies, standards organisations, civil society organisations and some governments and multilateral organisations.

Transparency
A public website (www.responsiblenanocode.org) has been developed to allow the group to communicate with external audiences about the purpose and process of the Code's development and to form the focus of the consultation programme. Information on the process, including 'Terms of Reference', Working Group composition, 'Records of the Deliberations' and the Consultation Draft of the Code will be available on the site.

For further information please contact Hilary Sutcliffe at Responsible Futures on 020 7520 9086 or email hilary@responsiblefutures.com

Terms of Reference - Appendix 1

Information about Founding Partners, Chair and Secretariat

The Earl of Selborne KBE FRS
Lord Selborne is a hereditary (elected) Conservative member of The House of Lords. He currently serves on the Select Committee for Science and Technology, of which he is a previous chair. He has also chaired Sub-Committee D (Agriculture and Environment) of the European Union Select Committee. He is Chair of the Foundation for Science and Technology, Chair of the Trustees of the Royal Botanic Gardens, Kew and Chair of the Royal Society's Science in Society Consultative Group.

He has previously chair of the UK Chemical Stakeholders' Forum and served as Chancellor of the University of Southampton, President of the Royal Geographical Society and Chairman of the Agricultural and Food Research Council. He is a Fellow of the Royal Society, The Institute of Biology and the Linnean Society.

The Royal Society
The Royal Society is national academy of science for the UK and the Commonwealth. It is the world's oldest scientific academy in continuous existence, and has been at the forefront of enquiry and discovery since its foundation in 1660. As well as providing an authoritative voice and leadership for UK science, it provides objective advice for policymakers on science and its relationship with society. It aims to ensure that policies on key issues are influenced by the best independent science.
The Royal Society is committed to encouraging the responsible development of new and emerging technologies for the maximum benefit of humanity and the environment. It is well placed to provide an expert, independent and realistic assessment of the risks and benefits that new and emerging technologies could present. The Society has undertaken projects on a wide range of scientific areas. For more information visit www.royalsoc.ac.uk/policy.

In 2003, the UK Government commissioned the Royal Society and the Royal Academy of Engineering to carry out an independent study on nanotechnologies. The two organisations set up a group to consider current and future developments in the field, and to identify the potential pros and cons of nanotechnologies for society.

The group consisted of scientists and engineers, and experts on consumer affairs, the environment, social sciences and ethics. They consulted with a wide range of people, including members of the public, and the Royal Society and Royal Academy of Engineering published their joint report in July 2004. The report recognises that nanotechnologies have the potential to bring benefits to society, and recommends a series of steps to realise this potential, whilst minimising possible future uncertainties and risks. More information can be found at www.nantec.org.

Insight Investment
Insight Investment is the asset manager of the HBOS group and is one of the UK's largest investment managers It manages £96.1 billion as at March 2007

Insight adopted a responsible investment policy in 2002. That policy committed Insight to take into account in all of its investment decisions the potential financial impacts of companies' exposure to, and quality of their management of, a wide range of environmental, social and governance issues. Further, it committed Insight to use its influence as a shareholder to encourage companies to achieve high standards of corporate governance and corporate responsibility.

Insight has been tracking the development and issues associated with nanotechnology since 2004 and began its engagement with companies on the issue in 2006. As an investment manager, it is important that prior to making an investment in any company involved in nanotechnology Insight thoroughly assesses a company's understanding of the risks associated with nano-applications and determines how effectively it is managing those risks. Insight also aims to contribute to the development of nanotechnology by working with a wide range of stakeholders to identify and develop effective approaches to managing those risks. The principal way it is doing so is by collaborating in this initiative to develop a Code for the responsible development of nanotechnology. For further information see www.insightinvestment.com

The Nanotechnology Industries Association

Formed in 2005, by a group of companies from a variety of industry sectors including healthcare, chemicals, automotive and consumer products, the Nanotechnology Industries Association (NIA) creates a clear single voice to represent the diverse industries' views in the multi-stakeholder debate on nanotechnology, by providing an interface with government, acting as a source for consultation on regulation and standards, communicating the benefits of nanotechnologies and interacting with the media to ensure an ongoing advancement and commercialisation of nanotechnologies.

The NIA promotes the responsible use of nanotechnology and raises awareness of its many applications among key audiences. Many representative organisations have been established around the world to support the research, invention, development, and exploitation of nanotechnologies, but few of these organisations are grounded in industry, or currently represent industrial views on practical applications for nanotechnologies.

The unique feature of the NIA is that it represents a purely industry-led perspective derived from the views of the collective membership, which is made up of many varied companies all at different stages of life cycle and with a variety of interests in the huge range of technologies that derive their benefit from the nanoscale. This enables those seeking comment from industry to have one port of call and avoids the need to approach individual companies for statements on specific issues. The breadth of the membership enables the NIA to put forward strong proposals to government and regulatory authorities to promote an environment that supports the application and utilisation of nanotechnologies. For further information see www.nanotechia.co.uk

The Nanotechnology Knowledge Transfer Network

The Nanotechnology Knowledge Transfer Network (Nano KTN) is one of twenty-three KTNs established by the DTI and the Technology Strategy Board (TSB) that cover a range of technologies and market sectors. The aims of the KTNs are to deliver improved industrial performance through innovation and new collaborations, to drive knowledge transfer between the supply and demand sides of technology-enabled markets, to facilitate innovation and knowledge transfer, and to provide a forum for a coherent business voice to inform government of its technology needs and about issues, such as regulation, which are enhancing or inhibiting innovation in the UK.

The UK, as one of the worlds leading science and technology countries, is at the forefront of developments in nanotechnology and the UK Government has invested significant funds to support the development of a UK industrial capability. The Nanotechnology KTN has been established to build upon the successes of the MNT Network and to provide the UK with a strong network to support the exploitation and commercialisation of principally nanotechnologies, but also microtechnologies as these are often intimately linked together in applications, through informing, linking and facilitating innovation and collaborations between suppliers and users with the aim of strengthening the supply chains and building a powerful UK community.

For further information see www.nanotechnologyKTN.com

Responsible Futures

Responsible Futures is an organisation which specialises in work at the leading edge of the responsibility agenda – both in the corporate and public policy arenas. Its focus is on developing new approaches, innovative solutions or bringing a fresh eye to existing problems.

Responsible Futures was appointed the Secretariat to the Responsible Nanotech Code Initiative. Director Hilary Sutcliffe had been an early initiator of the process and had drafted the supporting paper and workshop report for the three Founding Partners. She has over 12 years experience in corporate responsibility including participating in a number of Code development initiatives and working with businesses and ngos to understand and implement responsible business practice.

For further information see www.responsiblefutures.com

Terms of Reference - Appendix 2

Responsible Nanotechnologies Code Working Group

Name	**Title**	**Organisation**
Chair Lord John Selborne KBE FRS		
Royal Society Dr Nick Green	Manager, Science Policy	Royal Society
Insight Investment Ms Rachel Crossley	Director, Investor Responsibility	Insight Investment
NIA Dr Steffi Friedrichs	Director	NIA
Nanotechnology Knowledge Transfer Network Dr Mike Pitkethly	CEO	Nanotechnology KTN
Secretariat Ms Hilary Sutcliffe	Director	Responsible Futures
Business Mr Chris Wilson	External Communications Manager	BASF
Dr Benjamin Gannon	Exec Director Gov Affairs & Policy EU	Johnson & Johnson
Dr Peter Bishop	Research Manager	Johnson Matthey
Dr Sally Jones	Public Relations Manager	Johnson Matthey
Dr Barry Park	COO	Oxonica
Dr Anthony Dagger	Research Scientist	Smith & Nephew
Dr Graeme Howling	Project Manager – Biomaterials	Smith & Nephew
Mr Stuart Challenor	Trading Law & Technical Manager	Tesco
Dr Russell Clarke	Commercial Manager	Thomas Swann & Co
Dr Charles-Francois Gaudefroy	Head of Technical Affairs	Unilever
Ms Truus Huisman	External Affairs Director EU	Unilever
Academic/Science		
Dr Rob Aitken	Director of Research Development	Institute of Occupational Medicine
Professor Vicki Stone	Professor of Toxicology	Napier Univ
Prof Nick Pidgeon	Prof of Applied Psychology	University of Cardiff
Professor Richard Jones FRS	Prof of Physics	Univ of Sheffield
NGO and other organisations Mr Frank Barry	Representative	Amicus Union
Dr David Grimshaw	International Team Leader – Nanotech	Practical Action
Ms Sue Davies	Chief Policy Advisor	Which?

Terms of Reference - Appendix 3

Responsible Nano Code Work Plan

Working Group Meeting One – 25th June 2007
Lunch at Royal Society, 12.00noon

- Working group members meet for the first time
- Introductions
- Discussion of working group membership
- Discussion of proposed TOR
- Discussion of proposed work plan
- Discussion of Code purpose and remit
- Discussion of areas our Code may cover
- Agreement to proceed

Between meetings one and two, June-July 07

- Outline draft of Code, role and remit, prepared based on Meeting One discussions
- Emailed in advance of Meeting Two

Meeting Two – 30 July 07
Discussion of outline Code - held at Insight Investment

- Detailed discussion of Code role, remit and initial draft

Between meetings two and three, July - Sept 07

- Next draft of Code prepared based on these discussions
- Working Group interacts and gives further input through secure internet Drafting Forum
- Provisional consultation draft prepared
- Secretariat prepares strategy for consultation stage and initial list of those to be consulted to be discussed at next meeting. Draft strategy and list sent in advance of meeting

---

Meeting Three – w/c 3 September 2007
Approval of draft Code, agreement of consultation list and process

- Presentation of next draft of Code
- Presentation of proposed consultation process & proposed list of those to be consulted
- Working group members invited to add to consultation list
- Presentation of 'crib sheet'/questionnaire for consultation process
- Agreement reached on Code to go out for consultation and process involved

---

Between meetings three and four – Sept-Nov 07

- Amendments to Code and consultation process made following meeting and agreed by email

Consultation Process

- The consultation process seeks to identify and consult opinion formers involved both in nanotechnology and international codes and governance to assess their views on this pilot Code. We aim to consult with a range of stakeholders from ngos, civil society organisations, academics and businesses.
- We aim for this to involve key international groups, but the list will not be exhaustive at this stage. We will also engage with appropriate EU and OECD programmes as part of this process

Telephone and face to face interviews:
To ensure a credible research process at least 15-20 organisations will be consulted. The consultation will be conducted by Responsible Futures and Insight Investment

Email consultation
Approximately 20 will be consulted via email and invited to submit their views to the group

Consultation Report
A report of the consultation findings will be prepared for presentation to the WG and emailed in advance of Meeting Four

---

Meeting Four – w/c 19 November 07
Presentation of consultation findings & agreement of Code amendments

- Presentation of consultation findings
- Illustrate impact of consultation on Code draft
- Next draft of Code prepared for discussion
- Discussion of launch programme and beyond

Between meetings four and five – November - January

- Update Code in the light of meeting agreement and circulate for final agreement
- Circulation of final report which would include thinking behind the Code, consultation findings and final draft of Code
- Agreement of launch programme and activity beyond the launch

---

Meeting Five – w/c 14 January 08
Presentation of consultation findings & agreement of Code amendments

- Sign off Code and report
- Agreement of launch programme and activity beyond the launch

---

Launch – w/c 4 February 2008

- Launch at the Royal Society

ENDS

If you have questions or require further information, please contact Hilary Sutcliffe at Responsible Futures on 020 7520 9086 or email hilary@responsiblefutures.com.