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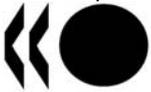
**ENVIRONMENT DIRECTORATE
JOINT MEETING OF THE CHEMICALS COMMITTEE AND
THE WORKING PARTY ON CHEMICALS, PESTICIDES AND BIOTECHNOLOGY**

**SERIES ON THE SAFETY OF MANUFACTURED NANOMATERIALS
Number 18**

MANUFACTURED NANOMATERIALS: ROADMAP FOR ACTIVITIES DURING 2009 AND 2010

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**OECD Environment, Health and Safety Publications
Series on the Safety of Manufactured Nanomaterials**

No. 18

**MANUFACTURED NANOMATERIALS:
ROADMAP FOR ACTIVITIES DURING 2009 AND 2010**

IOMC

INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS

A cooperative agreement among **FAO, ILO, UNEP, UNIDO, UNITAR, WHO and OECD**

**Environment Directorate
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
Paris 2009**

Also published in the Series of Safety of Manufactured Nanomaterials:

- No. 1, *Report of the OECD Workshop on the Safety of Manufactured Nanomaterials: Building Co-operation, Co-ordination and Communication (2006)*
- No. 2, *Current Developments/ Activities on the Safety of Manufactured Nanomaterials: Tour de table at the 1st Meeting of the Working Party on Manufactured Nanomaterials (2006)*
- No. 3, *Current Developments/ Activities on the Safety of Manufactured Nanomaterials: Tour de table at the 2nd Meeting of the Working Party on Manufactured Nanomaterials (2007)*
- No. 4, *Manufactured Nanomaterials: Programme of Work 2006-2008 (2008)*
- No. 5, *Current Developments/ Activities on the Safety of Manufactured Nanomaterials: Tour de table at the 3rd Meeting of the Working Party on Manufactured Nanomaterials (2008)*
- No. 6, *List of Manufactured Nanomaterials and List of Endpoints for Phase One of the OECD Testing Programme (2008)*
- No. 7, *Current Developments/ Activities on the Safety of Manufactured Nanomaterials: Tour de table at the 4th Meeting of the Working Party on Manufactured Nanomaterials (2008)*
- No. 8, *Preliminary Analysis of Exposure Measurement and Exposure Mitigation in Occupational Settings: Manufactured Nanomaterials (2009)*
- No.9, *EHS Research Strategies On Manufactured Nanomaterials: Compilation Of Outputs (2009)*
- No.10, *Identification, Compilation and Analysis of Guidance Information for Exposure Measurement and Exposure Mitigation: Manufactured Nanomaterials (2009)*
- No.11, *Emission Assessment for the Identification of Sources and Release of Airborne Manufactured Nanomaterials in the Workplace: Compilation of Existing Guidance (2009)*
- No.12, *Comparison of Guidance on Selection of Skin Protective Equipment and Respirators for Use in the Workplace: Manufactured Nanomaterials (2009)*
- No. 13, *Report of an OECD Workshop on Exposure Assessment and Exposure Mitigation: Manufactured Nanomaterials (2009)*
- No. 14, *Guidance Manual for the Testing of Manufactured Nanomaterials: OECD Sponsorship Programme (2009)*
- No. 15, *Preliminary Review of OECD Test Guidelines for their Applicability to Manufactured Nanomaterials (2009)*
- No. 16, *Manufactured Nanomaterials: Work Programme 2009-2012 (2009)*

No. 17 *Current Developments in Delegations and other International Organisations on the Safety of Manufactured Nanomaterials- Tour de Table (2009)*

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ABOUT THE OECD

The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental organisation in which representatives of 30 industrialised countries in North America, Europe and the Asia and Pacific region, as well as the European Commission, meet to co-ordinate and harmonise policies, discuss issues of mutual concern, and work together to respond to international problems. Most of the OECD's work is carried out by more than 200 specialised committees and working groups composed of member country delegates. Observers from several countries with special status at the OECD, and from interested international organisations, attend many of the OECD's workshops and other meetings. Committees and working groups are served by the OECD Secretariat, located in Paris, France, which is organised into directorates and divisions.

The Environment, Health and Safety Division publishes free-of-charge documents in ten different series: **Testing and Assessment; Good Laboratory Practice and Compliance Monitoring; Pesticides and Biocides; Risk Management; Harmonisation of Regulatory Oversight in Biotechnology; Safety of Novel Foods and Feeds; Chemical Accidents; Pollutant Release and Transfer Registers; Emission Scenario Documents; and the Safety of Manufactured Nanomaterials.** More information about the Environment, Health and Safety Programme and EHS publications is available on the OECD's World Wide Web site (<http://www.oecd.org/ehs>).

This publication was developed in the IOMC context. The contents do not necessarily reflect the views or stated policies of individual IOMC Participating Organizations.

The Inter-Organisation Programme for the Sound Management of Chemicals (IOMC) was established in 1995 following recommendations made by the 1992 UN Conference on Environment and Development to strengthen co-operation and increase international co-ordination in the field of chemical safety. The participating organisations are FAO, ILO, UNEP, UNIDO, UNITAR, WHO and OECD. The World Bank and UNDP are observers. The purpose of the IOMC is to promote co-ordination of the policies and activities pursued by the Participating Organisations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

This publication is available electronically, at no charge.

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FOREWORD

The OECD Joint Meeting of the Chemicals Committee and Working Party on Chemicals, Pesticides and Biotechnology (the Joint Meeting) held a Special Session on the Potential Implications of Manufactured Nanomaterials for Human Health and Environmental Safety (June 2005). This was the first opportunity for OECD member countries, together with observers and invited experts, to begin to identify human health and environmental safety related aspects of manufactured nanomaterials. The scope of this session was intended to address the chemicals sector.

As a follow-up, the Joint Meeting decided to hold a Workshop on the Safety of Manufactured Nanomaterials in December 2005, in Washington, D.C. The main objective was to determine the “state of the art” for the safety assessment of manufactured nanomaterials with a particular focus on identifying future needs for risk assessment within a regulatory context.

Based on the conclusions and recommendations of the Workshop [ENV/JM/MONO(2006)19] it was recognised as essential to ensure the efficient assessment of manufactured nanomaterials so as to avoid adverse effects from the use of these materials in the short, medium and longer term. In 2006, the OECD’s Chemicals Committee agreed to a Work Programme on Manufactured Nanomaterials for 2006-2008 [ENV/JM/MONO(2008)2]. The aim of the programme is to address human health and environmental safety aspects of manufactured nanomaterials. The OECD Council established the Working Party on Manufactured Nanomaterials (WPMN) to implement this programme of work.

In 2008, the Working Party renewed its Work Programme for 2009-2012, which was approved by the Chemicals Committee during its 43rd Meeting (November 2008) together with an updated Terms of Reference [ENV/JM(MONO)22]. At the same time, the Joint Meeting requested a description of upcoming events and expected outputs of the Working Party on Manufactured Nanomaterials (WPMN) together with timelines. Upon the request, the 5th meeting of the WPMN (March 2009) prepared a Roadmap for Activities during 2009-2012 and agreed that this document would be of continuing value, not just for the Joint Meeting, but also for the WPMN in planning its upcoming events and outputs. It was also noted that new delegates are joining the WPMN and its various activities on a regular basis. It was deemed appropriate, therefore, to include some brief additional background information which highlights how the work of the WPMN relates to the other programmes under the Joint Meeting as well as the OECD as a whole. Most of the description of the upcoming events and outputs, (that is, the “Roadmap” component of this document) is included in a series of tables which identify the key deliverables of the WPMN and their expected timing.

The 44th Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides, and Biotechnology (Joint Meeting) agreed to declassify this document and also suggested that it be update from time to time as an aide memoire for the benefit of the WPMN and its delegates, as well as other interested stakeholders.

This document is published on the responsibility the OECD’s Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides, and Biotechnology.

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THE WORKING PARTY ON MANUFACTURED NANOMATERIALS (WPMN)

The Working Party on Manufactured Nanomaterials¹ was established in 2006 to help member countries efficiently and effectively address the safety challenges of nanomaterials. OECD has a wealth of experience in developing methods for the safety testing and assessment of chemical products.

The Working Party brings together more than 100 experts from governments and other stakeholders from: a) OECD Countries; b) non-member economies such as Brazil, China, the Russian Federation, Singapore and Thailand; and c) observers and invited experts from UNEP, WHO, ISO, BIAC², TUAC³, and environmental NGOs.

Although OECD member countries appreciate the many potential benefits from the use of nanomaterials, they wished to engage, at an early stage, in addressing the possible safety implications at the same time as research on new applications is being undertaken.

The Working Party is implementing its work through eight main areas of work to further develop appropriate methods and strategies to help ensure human health and environmental safety:

- Development of a Database on Human Health and Environmental Safety (EHS) Research;
- EHS Research Strategies on Manufactured Nanomaterials;
- Safety Testing of a Representative Set of Manufactured Nanomaterials;
- Manufactured Nanomaterials and Test Guidelines;
- Co-operation on Voluntary Schemes and Regulatory Programmes;
- Co-operation on Risk Assessment;
- The role of Alternative Methods in Nanotoxicology; and
- Co-operation on Exposure Measurement and Exposure Mitigation.

Each area of work is being managed by a steering group, which comprises members of the WPMN, with support from the Secretariat. Each steering group implements its respective “operational plans”, each with their specific objectives and timelines. The results of each project are then evaluated and endorsed by the entire WPMN.

This document was prepared by the WPMN and it was endorsed at its 5th Meeting in March 2009.

¹ Updated information on the OECD’s Programme on the Safety of Manufactured Nanomaterials is available at: www.oecd.org/env/nanosafety

² The Business and Industry Advisory Committee to the OECD

³ Trade Union Advisory Committee to OECD.

MANUFACTURED NANOMATERIALS: ROADMAP FOR ACTIVITIES DURING 2009 AND 2010

Overview

1. The purpose of this document is two-fold. First, it presents a brief description of the ways in which the Working Party on Manufactured Nanomaterials (WPMN) contributes to the overall objectives of the Environment, Health and Safety Programme (EHS), and the OECD as a whole. Second, it describes the key expected deliverables of the WPMN with an approximate timing of when the Joint Meeting might be expected to review them. This should allow delegations to both the WPMN and the Joint Meeting to better see the relationship of the work of the WPMN to that of other parts of the Joint Meeting; and to facilitate a better understanding of how the WPMN work is unfolding over time to ensure enhanced utility and maximum participation.

The WPMN; the Joint Meeting; the OECD

2. The OECD's mission is to bring together the governments of countries committed to democracy and the market economy from around the world to promote policies intended to:

- Support sustainable economic growth and employment; and
- Promote a rising standard of living and trade liberalisation.

3. By "sustainable economic growth", the OECD means growth that balances economic, social and environmental considerations. In short, the OECD aims to make the world economy stronger and fairer, while ensuring a better and cleaner environment.

4. In pursuit of this mission, the OECD, amongst other things:

- promotes the efficient use of its members economic resources;
- pursues policies designed to achieve economic growth and internal and external financial stability while avoiding developments which might endanger their economies or those of other countries;
- pursues efforts to reduce or avoid obstacles to the exchange of goods and services and extend the liberalisation of capital movements;
- assesses how science, technology, innovation and education policies can efficiently contribute to sustainable economic growth and employment creation;
- provides governments with the analytical basis to develop environmental policies that are effective and economically efficient, including through performance reviews, data collection, policy analysis, and projections;
- considers the safety of chemicals and chemical products for man and the environment and develops and co-ordinates environment, health and safety activities internationally; and
- contributes to the economic development of both member and non-member countries in the process of economic development.

5. An important recent element has been OECD's response to the financial and economic crisis. A key element of this response is to foster "green" and innovation-led growth. Some policy concepts for the response are described in a recent note from the OECD Secretary General *OECD Strategic Response to the Financial and Economic Crisis: Contributions to the Global Effort* [C(2008)191/FINAL] and include promoting cleaner, climate-friendly alternatives to traditional, polluting energy production, investing in new eco-friendly technologies, diffusing greener technologies and new low-carbon technologies, and supporting R&D in green technologies.

6. For its part, the Joint Meeting has aligned the Environment, Health and Safety programme to support the overall mission and commitment of the organisation and its members. It also works closely with other international efforts such as SAICAM. The OECD has had 40 years of experience in protecting human health and the environment by promoting chemical safety worldwide. OECD countries regulate chemicals based on a system of testing chemicals to identify hazards, determine exposure and assess risks.

7. This is a science and rules-based approach which is based on information gathering, priority setting, testing and other methodologies to fill data gaps, to facilitate the assessment of hazards, potential exposure, risk assessment and, where needed, risk management measures. By developing the methodologies in OECD to implement this approach and by harmonizing their policies and instruments, member countries can reap the benefits of sharing the work among themselves. For this reason, efforts continue to be made in OECD to create, maintain and improve the various parts of a process which guarantees protection of health and environment by addressing issues associated with chemicals production and use, while avoiding inefficiencies caused by duplicative work and creation of non-tariff barriers to trade.

8. The WPMN was established in 2006 at a time when nanomaterials were becoming more common in products. Its work is intended to ensure that human health and environmental safety aspects of nanotechnology are adequately addressed. A major focus of its work is to ensure that existing instruments (for example, the OECD Test Guidelines) can be reliably applied to nanomaterials.

9. Taken as a whole, the key elements of the OECD, the Joint Meeting and crisis response policies where the WPMN is expected to make a significant contribution include:

- Cooperation in R&D (in respect of human health and environmental safety research);
- Harmonization of approaches to avoid obstacles to, and improve, trade;
- Burden sharing to fill data gaps in understanding the risks of chemicals; and
- Promoting cleaner, climate friendly alternatives.

10. These key elements are being addressed by the WPMN through the implementation of eight projects as well as an upcoming conference on the environmental benefits of manufactured nanomaterials see [ENV/JM(2009)15] which is being organised in co-operation with OECD's Working Party on Nanotechnology. Table 1 outlines the eight projects and describes how each aligns with the above elements. It should be noted that each of the eight projects is managed by a steering group (SG)⁴.

⁴ Projects 1 (SG1) and 2 (SG2) were recently merged because of the close affinity of their work.

Roadmap: Key deliverables and timings

11. At the time of writing, eight documents have been already been made publicly available as publications in the *Series on the Safety of Manufactured Nanomaterials*. They are available for download from the OECD public website (www.oecd.org/env/nanosafety).

12. In addition, Table 2 shows the outputs and expected outputs of the WPMN. It includes “For official use” documents which may remain for internal use for the WPMN as well as documents and other outputs which are planned to be declassified.

13. Table 3 indicates an approximate time scale for the main activities of the WPMN. It should be recognised that the projects are inter-related and therefore co-ordination between projects is essential for effectiveness and efficiency of each activity. This table should be recognised as a snap-shot of the work of the WPMN.

14. Table 4 highlights the relationship between the WPMN and those of other international activities and the main upcoming events, which are relevant to the work of the WPMN, are listed in Table 5.

Table 1: WPMN projects and OECD Mission Elements

Project	OECD Mission Element	Description
Project 1: OECD Database on Safety Research	Cooperation in R&D, Burden Sharing	Searchable, web-based database of nanotechnology environmental health and safety research under way in OECD countries and observers.
Project 2: Research Strategies on Manufactured Nanomaterials	Cooperation in R&D, Burden Sharing	Review of nanotechnology EHS research conducted by WPMN participants with an eye towards identifying gaps, potential duplication and opportunities for strengthened collaboration.
Project 3: Safety Testing of a Representative Set of Manufactured Nanomaterials	Cooperation in R&D, Burden Sharing	Exploratory testing undertaken collaboratively by member and non-member countries and industry to develop datasets covering 59 mammalian and environmental toxicity, environmental fate, materials characterization, physical-chemical property and safety endpoints.
Project 4 : Manufactured Nanomaterials and Test Guidelines	Harmonization	Ensure that harmonized OECD test guidelines are available for use in the MAD program, and to provide guidance useful for members and participants in testing nanomaterials to determine their environmental health and safety implications.
Project 5: Co-operation on Voluntary Schemes and Regulatory Programmes	Harmonization	Information sharing among members to facilitate the application of consistent or harmonized approaches in voluntary or regulatory activities for reporting and risk management.
Project 6: Co-operation on Risk Assessment	Cooperation in R&D, Harmonization	Cooperation among members in exploring current risk assessment approaches and their possible application to manufactured nanomaterials; and developing recommendations for advancing the state of the science.
Project 7: Alternative Methods in Nano Toxicology	Cooperation in R&D, Harmonization	Research into the possible application of alternative test methods and how they might be used in the risk assessment of manufactured nanomaterials.
Project 8: Exposure Measurement and Exposure Mitigation	Harmonization	Information exchange and guidance development related to exposure measurement and exposure mitigation, addressing: i) exposure in occupational settings; ii) exposure to humans resulting from contact with consumer products and environmental releases of manufactured nanomaterials; and iii) exposure to biota in the environment resulting from releases of manufactured nanomaterials, including releases from consumer products containing manufactured nanomaterials.
Conference on Potential Environmental Benefits of Nanotechnology: Fostering Safe, Innovation-Led Growth	Promoting Cleaner Alternatives	Exploration into the opportunities the challenges of the use of nanotechnologies for potential environmental benefit, including how to address safety, sustainability and life cycle aspects.

Table 2: Outputs of the WPMN

Outputs/ outcomes	Date to be Completed	Target audience	How it will be made available	Where it will be made available	Need for communication material	Issues/ concerns
OECD Database on EHS research (SG1)						
“OECD Database on Research into the Safety of Manufactured Nanomaterials” (Phase 1)	April 1 st 2009	Policy makers Researchers Stakeholders	Searchable database on the internet	OECD public website	Guidance manual that will include information relevant to end users, data providers and delegates responsible for checking data entry	Data entry to the database may be started June.
OECD Database (Phase 2)	Not yet specified	Expected to be as for Phase 1	To be specified	To be specified	To be specified	CBI policy
EHS Research strategies on Manufactured Nanomaterials (SG2)						
Interim report for Project Two; EHS research strategies on manufactured nanomaterials	June 2008	WPMN Researchers Policy makers	Classified document	Password protected site	The document includes background information.	The report includes recommendation of putting Project Two on hold until more information is available through the database ⁵ .

⁵ Projects 1 (SG1) and 2 (SG2) were merged at the 5th meeting of the WPMN (March 2009) based on the close affinity of their work.

Outputs/ outcomes	Date to be Completed	Target audience	How it will be made available	Where it will be made available	Need for communication material	Issues/ concerns
Output documents from Project Two; EHS research strategies on manufactured nanomaterials (e.g. The further categorisation of research themes to identify topics appropriate for division of work among OECD-members and Sequence/priority of activities in nanoresearch)	June 2008	WPMN Researchers Policy makers	Classified document	Password protected site		
Output documents for Project Two; EHS research strategies on manufactured nanomaterials: including - The list of research themes relevant to EHS nanomaterials - The analysis of the frequency of entries in the in the list of current/completed as well as planned research projects	Published (2009)	WPMN researchers Policy makers	Declassified documents	OECD public website	Introduction and background	
Safety Testing of a Representative Set of Manufactured Nanomaterials (SG3)						
Working definition of “manufactured nanomaterials”	Completed (open to revision, as needed)	WPMN	Classified document [Annex II of ENV/CHEM/NANO/M(2007)1]	Password protected site	The document includes background information.	To be reviewed, as needed. Not for declassification
Guidance Manual for the Testing of Manufactured Nanomaterials: OECD's Sponsorship Programme	published (2009)	WPMN Sponsors Regulatory Agencies Risk Assessors	Declassified document	OECD Public website	Introduction and background	This document is a living document and will include additions as annexes.
Sponsorship Programme for the Testing of Manufactured Nanomaterials: Dossier development plans: preliminary results	March 2009	WPMN Regulatory Agencies Risk Assessors	Classified documents	OECD Public website & database	Introduction and background	Sponsors work towards a version of DDP to be declassified 6th WPMN.
Sponsorship Programme for the Testing of Manufactured Nanomaterials: information document	2009	Policy makers Researchers Stakeholders Public	Declassified document	OECD Public website		The Secretariat will prepare a document.

Outputs/ outcomes	Date to be Completed	Target audience	How it will be made available	Where it will be made available	Need for communication material	Issues/ concerns
Sponsorship Programme for the Testing of Manufactured Nanomaterials: interim report of Phase 1 testing	8 th WPMN	WPMN and Stakeholders outside of the WPMN	Declassified document	OECD public website	Introduction and background to be included	
<u>Manufactured Nanomaterials and Test Guidelines (SG4)</u>						
Considerations for Evaluating Test Guidelines	November 2007	WPMN (SG3 and SG4)	Classified documents	Password protected site	Introduction and background	
Information Sources for SG4 subgroups	November 2007	WPMN(SG4's section groups)	Classified documents	Password protected site	Introduction and background	To be updated as needed. Not for declassification.
Report: the Preliminary Review of the OECD Test Guidelines and its applicability to MN	Published (2009)	WPMN WNT ⁶	Declassified documents	Password protected site	Introduction and background	
Guidance documents on Sample Preparation and Dosimetry	To be determined	WPMN Regulatory Agencies Researchers Laboratories	Declassified documents	OECD Public website	Introduction and background	Consultation with WNT may be needed
Guidance Document on Guidance on the use of pulmonary instillation studies and consideration of value and limitations compared to inhalation studies	1 st draft March 2009	WPMN Regulatory Agencies Researchers Laboratories	Declassified documents	OECD Public website	Introduction and background	Consultation with WNT may be needed
Report: analysis on the need for new TGs/ or Guidance document(s) to address specific properties of MN	To be determined	WPMN WNT	Classified documents	Password protected site	Introduction and background	
Report: priorities for TGs⁷ to be revised and new TGs to be developed	To be determined	WPMN WNT	Classified documents	Password protected site	Introduction and background	

⁶ WNT: OECD's Working Group on National Coordinators for Test Guideline Programme

⁷ Four areas: i) physico-chemical properties and characterisation; ii) human health effects; iii) environmental effects; and iv) fate and behaviour.

Outputs/ outcomes	Date to be Completed	Target audience	How it will be made available	Where it will be made available	Need for communication material	Issues/ concerns
Plan/ recommendation to update current test guidelines, generate new test guidelines and validate them and gain acceptance	To be determined	WPMN WNT Regulatory Agencies Researchers	Declassified documents	OECD Public website	Introduction and background	
<u>Co-operation on Voluntary Schemes and Regulatory Programmes (SG5)</u>						
Analysis of Information Gathering Initiatives	Declassified ⁸	Regulatory Agencies	Declassified document	OECD Public website	Introduction and background	Updates as needed
Questionnaire on Regulatory Regimes For Manufactured Nanomaterials	Revised survey available in October 2009	WPMN Regulatory Agencies	Declassified	OECD Public website	Introduction and background	
Table of Comparison - Information Gathering Schemes	To be published in 2009	Regulatory Agencies	Declassified document	OECD Public website	Introduction and background	Updates as needed
International Sharing and Comparison of Data on Manufactured Nanomaterials	February 2009	WPMN Regulatory Agencies	Classified document	Password protected site	Introduction and background	Updates as needed
<u>Co-operation on Risk Assessment (SG6)</u>						
Report: on Risk Assessment of Manufactured Nanomaterials: critical issues	In June 2009	WPMN	Declassified document	OECD public website	Introduction and background	Updated as needed
Report: supporting tools that offer the potential to strengthen and enhance risk assessment of MN	5th WPMN	WPMN	Declassified document	OECD public website	Introduction and background	

⁸ To be published in 2009 together with the *Table of Comparison*.

Outputs/ outcomes	Date to be Completed	Target audience	How it will be made available	Where it will be made available	Need for communication material	Issues/ concerns
Report: gap analysis and recommendations to the WPMN to address any identified gaps	October 2009	WPMN	Declassified document	OECD public website	Introduction and background	
<u>The Role of Alternative Methods in Nano Toxicology (SG7)</u>						
Report of the work on Alternative Methods: analysis and recommendations	June 2008	WPMN (SG4)	Classified documents	Password protected site	Introduction and background	
Alternative methods: section for the Guidance Manual for Testing MN	October 2009	WPMN	For declassification (as part of the guidance manual)	Password protected site OECD public site		
<u>Co-operation on Exposure Measurements and Exposure Mitigation (SG8)</u>						
Preliminary analysis of exposure measurement and exposure mitigation in occupational settings: Manufactured Nanomaterials	Published (2009)	Regulatory Agencies Stakeholders Researchers Risk assessors	Declassified document	OECD public website	Introduction and background	
Exposure Measurement in Occupational Settings: summaries and preliminary analysis of documents relevant to exposure measurement	Published (2009)	Regulatory Agencies Stakeholders Researchers Risk assessors	Declassified document	OECD public website	Introduction and background	
Exposure Mitigation in Occupational Settings: summaries and preliminary analysis of documents relevant to exposure mitigation	Published (2009)	Regulatory Agencies Stakeholders Researchers Risk assessors	Declassified document	OECD public website	Introduction and background	
Analysis of guidance documents for exposure measurements and exposure mitigation in occupational settings	Published (2009)	Regulatory Agencies Stakeholders Researchers Risk assessors	Declassified document	OECD public website	Introduction and background	
Exposure Mitigation Guidance for Laboratories: summaries and preliminary analysis	2010	Regulatory Agencies Stakeholders Researchers Risk assessors	Declassified document	OECD public website	Introduction and background	

Outputs/ outcomes	Date to be Completed	Target audience	How it will be made available	Where it will be made available	Need for communication material	Issues/ concerns
<u>WPMN</u>						
Report (periodical) on Current Developments/ Activities in countries and organisations on the Safety of Manufactured Nanomaterials	5 published	Stakeholders outside of the WPMN	Report	OECD public website	Introduction and background	
Nanotechnologies at OECD	Completed (2008)	IFCS ⁹ Stakeholders outside of the WPMN	Report	OECD public website IFCS web site		

⁹ This paper was prepared by the OECD Secretariat, on request, for Forum VI of the Intergovernmental Forum on Chemical Safety (IFCS).

Table 3: Timescale 2009-2012

	2007-2008	2009	2010	2011	2012
SG1	Phase 1 database development		Database maintenance/ version-up		
SG2	Research themes	hotspot	Analysis of research projects/ hot-spot networking		
SG3	Working Definition Representative set of MN, endpoints for Phase 1 programme	DDP Review	Management of SG3 Phase 2 discussion		
Sponsorship Programme	GMS development		Testing	Interim report	Phase 2 testing?
	DDP development				
TG-IAM		Planning			
SG4	Preliminary-review of TGs		Identify needs of new/ revision of TG/ Priority setting		
		GSPD development		Rev-GSPD to be prepared as GD	
SG7	Text for GMS				
SG5	Info Gathering Initiative				
		Questionnaire			
	Share MN summary				
SG6	Draft Report of Critical Issues of Risk Assessment	Workshops inputs to the report	Supporting tools/ Gap analysis?		
SG8	Preliminary analysis in occupational settings		Occupational exposure		
			Consumer exposure		
			Environmental Exposure		
Benefits		Conference			

Table 4: Co-ordination activities with other bodies (2009-)

	OECD bodies	Standardisation organisations	Other international organizations
SG1/2			Linkage to WWC, ICON, NIOSH and EC databases ICON: research strategy?
SG3		working definition (cf. ISO TS27687:2008)	
SG4	- Exchange information with WNT before finalising the documents. - Follow-up on OECD (Q)SAR Application Toolbox	Close linkages in the Measurement & Characterization methods for toxicological testing. Possible parallel or complementary activities in relevant ISO TCs.	Review non-OECD methods
SG5	Working Party on Nanotechnology (WPN)	Possible parallel or complementary activities in relevant ISO TCs.	
SG6	Working Group on Chemical Accidents (WGCA)	Possible parallel or complementary activities in relevant ISO TCs.	-EC SCENIHR's working Group -WHO/ILO' International Technical Group on control banding -hold a workshop hosted by the Society of Risk Analysis
SG7	-Exchange information with WNT before finalising the documents. -Follow-up on OECD (Q)SAR Application Toolbox		
SG8	Possible linkage with Task Force on Environmental Exposure Assessment (Phase 2)	Possible parallel or complementary activities in relevant ISO TCs.	
Nano benefits	Close linkage with WPN	ISO/TC229- Task Group on Nanotechnology and Sustainability (?)	ICCM (SAICM), EU NANOFORUM 2009
Miscellaneous	PRTR, WG Pesticide,	ISO/TC229 (MSDS),	GHS ¹⁰ , FAO/WHO expert meeting, UNITAR, SAICM

¹⁰ Globally Harmonised System for Classification and Labelling of Chemicals

Table 5: Main events related to the activities of the WPMN

Year 2009

26 February	OECD WPMN SG8 face-to-face meeting, Bethesda, Maryland, US
2-3 March	OECD WPMN Sponsorship Programme Meeting, Paris, France
4-6 March	OECD WPMN: 5 th meeting Paris, France
30 March – 1 April	OECD: 21 st meeting of the WNT (Working Group of National Co-ordinators for the Test Guidelines Programme), Paris, France
11-15 May	SAICM/ICCM2, Geneva, Switzerland
1-5 June	Joint FAO/WHO Expert Meeting on the Application of Nanotechnologies in the Food and Agriculture Sectors: Potential Food Safety Implications, Rome, Italy
2-5 June	EURO NANO FORUM 2009, Prague, Czech Republic.
8-12 June	ISO TC229 meeting, Seattle, the US
8-11 June	OECD: 44 th Joint Meeting, Paris, France
10-12 June	OECD WPN: Workshop and Meeting, Paris, France
15-17 July	OECD Conference on Potential Environmental Benefits of Nanotechnology: Fostering Safe Innovation-Led Growth, Paris, France
16-18 September	OECD workshop on Workshop on Risk Assessment in a Regulatory Context (hosted by Society of Risk Analysis) and a face-to-face meeting of SG6, Washington DC, the US
25 September	OECD WPN Policy Roundtable, Vienna, Austria
18-22 October	ISO TC229 meeting, Tel Aviv, Israel
25-27 October	OECD WPMN: 6 th meeting, Paris, France
29 Nov– 1 Dec	OECD WPN Meeting

Year 2010¹¹

February	OECD: 45 th Joint Meeting, Paris, France
May	OECD WPMN: 7 th meeting, Paris, France
May	OECD WPN Meeting
November	OECD: 46 th Joint Meeting, Paris, France
29 Nov – 1 Dec	OECD WPN Meeting

Year 2011

February-March	OECD WPMN: 8 th meeting, Paris, France
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¹¹ Meeting dates in 2010 and 2011 will be confirmed in due course.