OECD WORK ON CHEMICALS AND ON MANUFACTURED NANOMATERIALS

Manufactured Nanomaterials/ Nanotechnology
UNITAR-OECD Workshop for the Latin America region
Bogotá, Colombia – 22-24 June 2015

OECD
BETTER POLICIES FOR BETTER LIVES

OECD

- Australia
- Austria
- Belg
- Canada
- Chile
- Czech Republic
- Denmark
- Estonia
- France
- Germany
- Finland
- Hungary
- Iceland
- Greece
- Israel
- Italy
- Ireland
- Korea
- Luxembourg
- Japan
- Norway
- Netherlands
- Mexico
- Poland
- Portugal
- NZ
- Slovenia
- Spain
- Slovak Republic
- Switzerland
- Turkey
- Sweden
- US
- UK

- **EC**
- **IGOs**
- **Non-member economies**
- **Industry**
- **Trade Unions**
- **Environmental NGOs**
- **Animal Welfare NGOs**

OECD's Work on Environment, Health and Safety

PROTECT
(man & environment)

Harmonized policies and Instruments of high quality for regulatory purposes

EFFICIENCY

Work sharing
Avoid duplication
Avoid non-tariff trade barriers
shorten time to market

WORK ON CHEMICALS

WHAT IT IS:

Policy dialogue

Development of safe chemical policies for EHS

Enhance harmonisation, co-operation and work sharing

Focused on countries regulatory needs

WHAT IT IS NOT:

- **Provider of technical assistance**
- **No capacity building**
- **Bank**
- **Supranational rule - making body**

OECD CHEMICALS

OECD Council

OECD Secretariat

Chemicals Committee

JOINT MEETING

WP Chemicals, Pesticides & Biotechnology

- Good Laboratory Practice
- Test Guidelines
- Manufactured Nanomaterials
- Hazard Assessment
- Exposure Assessment
- Pollutant Release and Transfer Registers
- Pesticides
- Biocides
- Chemical Accidents
- Biotechnology
- Novel Foods and Feeds

Mutual Acceptance of Data (MAD)

Test Guidelines

A single quality standard should be applied for testing of all chemical substances

Good Laboratory Practice

A single quality standard for test facilities throughout OECD

Mutual Acceptance of Data

Legally binding on OECD Member countries and other MAD Adherents

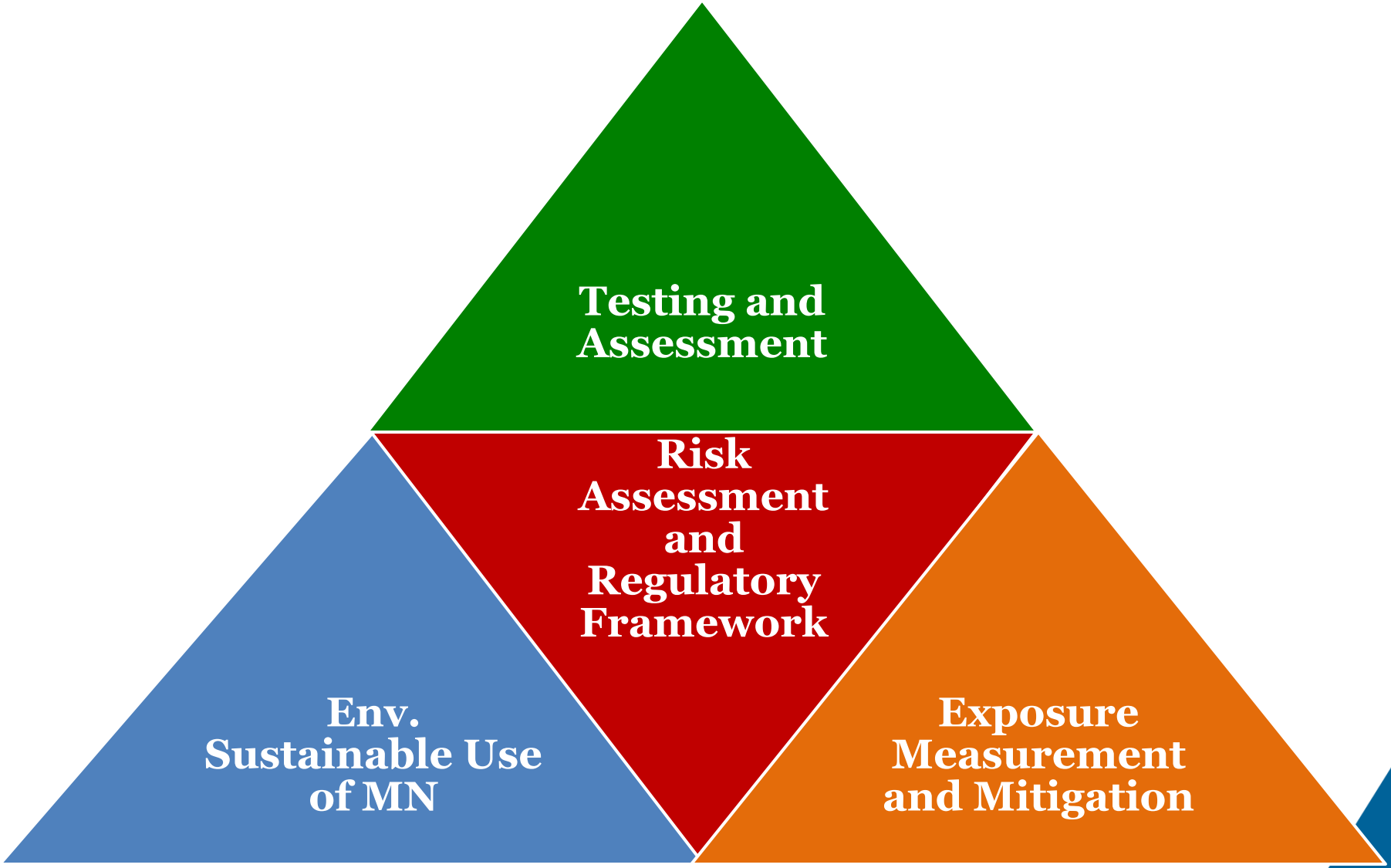
→Avoids duplication of testing: around Euros 150 million saved each year
→Reduces use of animals
→Reduces trade barriers

OECD COUNCIL RECOMMENDATION ON NANO

- **Existing Legal Frameworks are applicable (<u>might need to be adapted</u>)**

- In line with the Council Recommendation – the conducted testing of 11 nanomaterials was done by **<u>applying the OECD Test Guidelines but adapting them as appropriate</u>** to take into account the specific properties of manufactured nanomaterials

OECD's Areas of Work on Nano



Risk Assessment and Regulatory Framework

- To identified uncertainties in risk assessment when extrapolating from conventional chemical frameworks to manufactured nanomaterials [see ***ENV/JM/MONO(2012)8***]
- Prioritize gaps in risk assessment [***ENV/JM/MONO/2013(2013)18***]
- Regulated Nanomaterials [published as ***ENV/JM/MONO(2014)28***]

Exposure Measurement and Mitigation on MN - Relevant Publications

- Exposure Measurement and Mitigation in Occupational Settings
- Identification, Compilation and Analysis of Guidance Information for Exposure Measurement and Mitigation
- Emission Assessment for Identification of Sources and Release of Airborne MN in the Workplace: Compilation of Existing Guidance
- Comparison of Guidance on Selection of Skin Protective Equipment and Respirators for Use in the Workplace
- Exposure Assessment and Exposure Mitigation of MN: Workshop
- Comparison of Guidelines Related to Exposure to NM in Laboratories
- Available Methods and Models for Assessing Exposure to MNs
- Exposure Assessment of Nano-silver: Case Study
- Harmonized Tiered Approach to Measure and Assess the Potential Exposure to Airborne Emissions of Engineered Nano-Objects and their Agglomerates and Aggregates (NOAA) at Workplaces

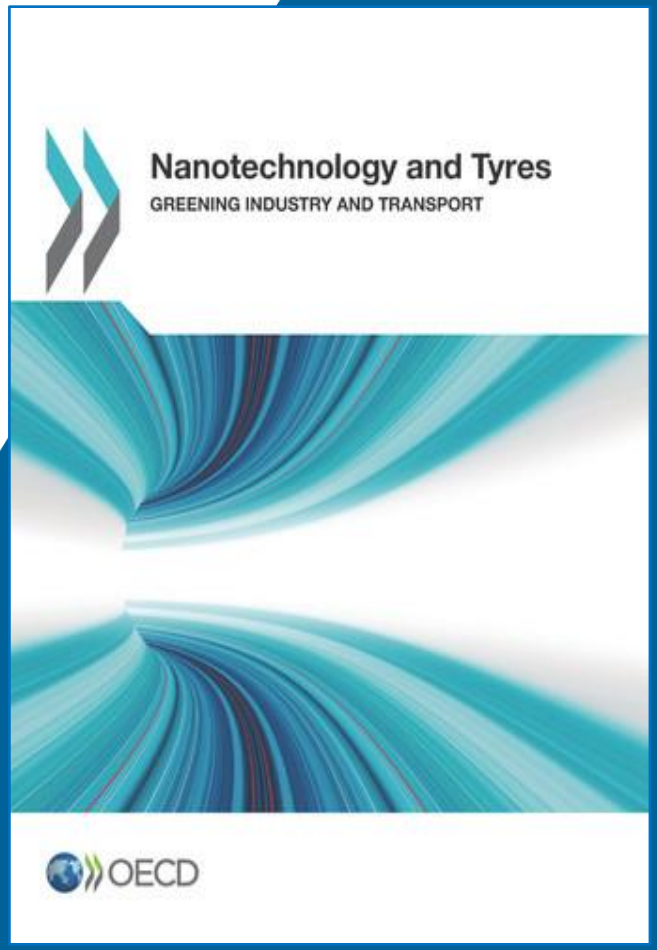
Exposure Measurement and Mitigation: Focusing on Env. & Consumers

- ***Survey on consumer and environmental exposure (Underway)***
- **Work completed***:
  - Occupational safety and health in nanotechnology and Organisation for Economic Cooperation and Development (2009) *Murashov et al J. Nanopart Res*
  - Science policy considerations for responsible nanotechnology decisions (2010) *Morris et al Nature Nanotechnology*
  - **OECD** Workshop on Nanomaterial Exposure Assessment (June 2015).

ENV. SUSTAINABLE USE OF MN

NANOTECHNOLOGY AND TYRES:

GREENING INDUSTRY AND TRANSPORT



The report emphasizes the importance of:

- **The *policies* to support research in the environmental, health and safety risks, as well as those to support the commercialisation of nanotechnology research results, for fostering responsible innovation in the tyre sector;**
- **Using available tools (e.g. cost/benefit analysis, LCA) to gain better insight into the socio-economic and environmental impacts of nanotechnology applications;**
- **Collaboration between governments and industry to address the specific challenges raised by the introduction of new nanomaterials in different industry sectors.**

WASTE CONTAINING NANOMATERIALS

Nanomaterials of concern in waste streams

Focused on waste treatment operations:

1. Incineration
2. Recycling
3. waste water treatment
4. landfilling

OECD POW 2013-2016

PROVISION OF KNOWLEDGE AND INFORMATION

Testing and Assessment of Nano

Hazard Assessment

Potential risk associated with NM

Exposure Assessment

Risk Assessment

Reporting tools (IUCLID, SIARs, Case Studies)

SUPPORT FOR CAPACITY BUILDING

IOMC Toolbox, Dissemination of products

Collaboration with other IOs

FACILITATION OF RISK REDUCTION

Read Across, categorization, substitution/ alternatives of hazardous chemicals

ASSISTANCE WITH GOVERNANCE

Test Guidelines, Nano Recommendation

Contact / Information/ Publications

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Publications free to download
www.oecd.org/env/nanosafety