Guidance for Developing a National Nanotechnology Policy and Programme

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Table of Contents of the Guidance Document

Part A: Background and Introduction

1. Working definitions
2. Nano Applications
3. Environmental and Health Concerns
4. Worker Health and Safety
5. Classification and Labelling
6. Research and Training Activities on Nano
7. Ethical Considerations
8. Relevant International Work
Table of Contents of the Guidance Document (cont.)

Part B: Developing a National Nano Programme

9. Development of a National Nano Policy and Programme
10. Developing the National Nano Assessment
11. Priority Setting of Nano
12. Establishing a Coordinating Mechanism
13. Stakeholder Training
15. Country Examples (Thailand, Switzerland)
Annexes

I. Nano Applications

II. Recommendations of IFCS

III. SAICM resolution II/4

IV. Prioritisation

V. Example Priority National Actions
Possible steps for a national nano policy and programme

1. Preparatory activities including stakeholder group

2. Inception meeting and awareness raising

3. Nano assessment

4. Selection of priority areas

5. National nano policy including coordination and structure

6. Training of stakeholders

7. Adoption of policy and endorsement

8. Stepwise implementation

9. Periodic reporting and amending of the nano policy
Situation Assessment: Products and Producers

Is there knowledge about:

Research institutions working with nano?

Industries working with nano?

Economic sectors using nano?

Nano containing products?
Situation Assessment: Information and Infrastructure

Is there a:

Legally required or voluntary registration for nanoproducts?

A review of activities involving nano?

A technical infrastructure for dealing with safety aspects of chemicals?

Can this infrastructure deal with nano?

Knowledge about the worth of international organizations (ISO, OECD, SAICM, UNITAR, WHO, etc.)?
Situation Assessment: Governance

Is there a:

Coordination mechanism for chemical safety?

Can this mechanism deal with nano?

An interministerial commission?

A framework of legal, economic, and voluntary instruments to deal with chemical safety?

Can this framework deal with nano issues?

Stakeholder involvement?
Situation Assessment: Available Management Options

Is there information on:

Health and environmental effects of nanomaterials?

Possible exposure to nanomaterials (workers, consumers, environment)?

Benefits of nanoproducts?

Resource needs for risk management?

Resource availability for risk management?
Priority setting for nano:

What are the most important issues? Then consider:

1. Is the number of priorities realistic?

2. Feasibility: Can the problem be efficiently addressed?

3. Is the time frame realistic?

4. Are the stakeholders committed?

5. Potential for support from outside, e.g. IGOs?

6. Economic impact of all parties involved throughout the life cycle?

7. Evaluation: Is it possible to measure progress?
Establishing a Coordination Mechanism:

Decide on involvement of:

Which ministries?

Which scientific institutions?

Which stakeholders (industry, business, labor, civil society)?

Which decision-makers?
Stakeholder Training:

Who needs to be trained:

Industrial by scientists?

Health by specialists?

Environmental specialists?

Research workers?

Industry workers?

Customs?
Basic Principles: Minimization of exposure

1. Reduce the exposure time;
2. Reduce the number of exposed workers;
3. Reduce the concentration of nano particles at the workplace
Hierarchy of protective measures

There are 4 levels of measures:

a) *Substitution*: Replace hazardous substances by less hazardous alternatives.


c) *Individual protection*: Use of personal protective equipment (masks with filter P3, gloves, closed eye glasses).

d) *Hygiene*: Possibilities for decontamination by washing (water, soap, shower); wear different clothes inside working area and home.
Establishing an action plan

1. Identify the problems
2. List the activities
3. Establish working groups
4. Ensure coordination
5. Consider an information system or a data base
6. Estimate realistic tame frames
7. Develop mile-stones
8. Establish indicators of progress
9. Agree on a budget
10. Obtain high-level agreement
11. Implement the action plan
12. Monitor the progress
Thank you

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