

Nanomaterials and worker protection

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ETUI 11th Seminar on worker protection and chemicals
Dublin, 25-26 June 2015



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diode

www.nanodiode.eu

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- Brief NanoDiode project details
- ETUI activities in NanoDiode
- Views from the tools
- Upcoming tools
- Future uses of tools



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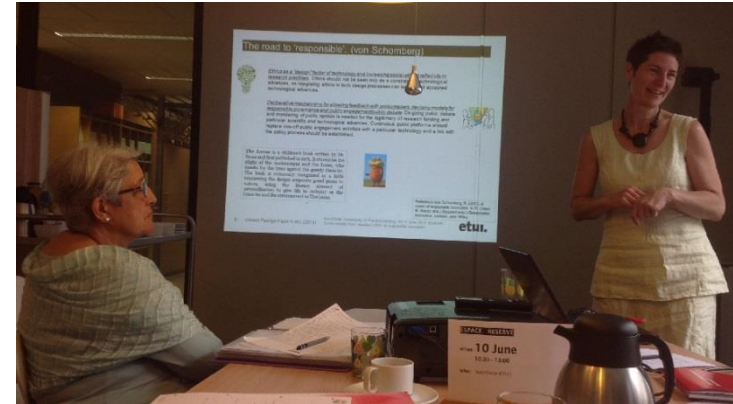
- EU funded project that runs from July 2013 to July 2016
- Partners from research (OSH, environmental, consumer), trade unions (ETUI), media (artists, journalists), and industry
- Project objective: Develop new strategies for outreach and dialogue along the nanotechnology value chain
- **INSPIRE**: Organise engagement and dialogue at the 'upstream' level of research policy
- **CREATE**: Enable processes of co-creation during research and innovation
- **EDUCATE**: Professionalise nanotechnology education and training
- **ENGAGE**: Establish a coherent programme for outreach and communication on nanotechnology



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- **Community of Practice** created: experts from OSH, hazardous substances and worker protection, communications, education, training
- identified which tools to develop, distill key information, refine structure, refine content
- **Pilot testing** of tools (presentations) with people from BG, DK, FI, MT, SE and UK
- Presentations to be put on ETUI website
- **Development of support tools** (simplified RE and nanomaterial lifecycles)
- Autumn **evaluation of tools** (presentations)



- 6 presentations on nanomaterials in the workplace from the worker's perspective

- Examples of uses of nanomaterials in the workplace
- What is nano?
- Are nanomaterials a worker health and safety risk?
- How can I know if nanomaterials are used in my workplace?
- Steps to prevent worker exposure to nanomaterials in the workplace
- Sharing your knowledge and experience

- Available in DK, EN, FI, SE

Sectors / products using nanomaterials

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Classes of nanomaterials

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Precaution as a first response

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Official information required to be provided by the employer

- Ask your employer for a statement on:
 - Whether nanomaterials are used in the workplace
 - Which nanomaterial is reflected in the chemical risk assessment the company should have undertaken
 - What preventive measures have been taken to avoid worker exposure
- Has the employer made information available to employees?
- If senior management is not sure, or if you want to have more information than what is provided by the company, there are several external sources which could potentially provide information.

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2a. Risk assessment – limits relating to nanomaterials

... information is not easily or always available

When undertaking a nanomaterial risk assessment in their workplace, employers may therefore encounter difficulties related to:

- insufficient information on the hazardous properties of nanomaterials;
- no standardised methods and devices to measure exposure levels and to identify nanomaterials and emission sources;
- limited information on effectiveness of risk reduction measures (filters, gloves, etc.) and
- lack of information on presence of nanomaterials, in mixtures or articles (products) and down the user chain, when nanomaterials, or products containing nanomaterials, are used or processed.

When in doubt, use the highest level of precaution to prevent exposure

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Why share with others?

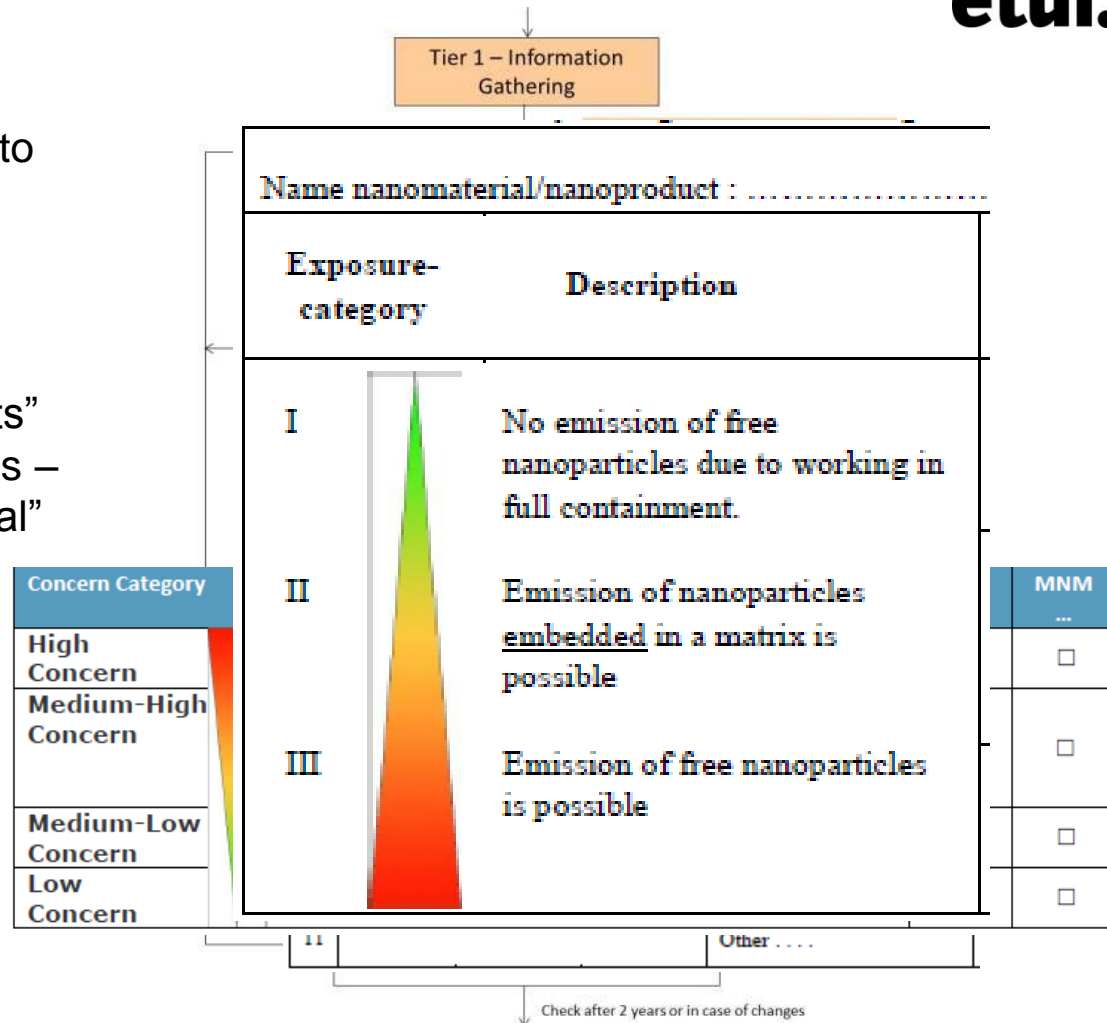
- Lack of important scientific information on worker health and safety specific to nanomaterials exposure = very little information on impacts on human health
- Need to empower health and safety representatives in engaging with employers: worker protection, worker participation, business decisions, risk assessment
- Need for dialogue between employers, employees, regulators, civil society, research and design communities = safe by design (design out hazardous substances)

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- 2 sets of infographics
- Simplified risk evaluation step-process with more detailed tables to help gather worker activity and exposure information specific to nanomaterials
- Lifecycles of 2-3 nanomaterials showing worker exposure “hotspots” and exposure prevention measures – turn the “theoretical” into the “actual”
 - Carbon nanotubes
 - Quantum dots?
 - Titanium dioxide / Iron oxide?



- **Lack of public information** on nano in products results in lack of prioritising nano in trade unions
- Good to repeat that **worker representatives are not required to become scientific experts on nano** to ensure companies provide high worker H&S protection AND to **encourage dialogue between employers and employees**
- Usefulness of creating two **simplified tools** to support presentations prepared already
 - **Step-by-step guide on risk evaluation** from worker's perspective – what information needed from worker, from employer?
 - **Lifecycle images of key nanomaterials** to turn theoretical into practical / “real” – CNTs, QDs, one other (TiO2?)
- Presenting of “best” information country-by-country (complaint that **lots of information is available only in English**)

Official information required to be provided by the employer

1. Ask your employer for a statement on:
 - Whether nanomaterials are used in the workplace
 - Which nanomaterials are used
 - How each nanomaterial is reflected in the chemical risk assessment the company should have undertaken
 - What preventive measures have been taken to avoid worker exposure
2. Has the employer made information available to employees?
3. If senior management is not sure, or if you want to have more information than what is provided by the company, there are several external sources which could potentially provide information.



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Date, location


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- How can the tools be further disseminated and used more systematically by trade unions and worker representatives?
- Trade union training activities
- Links to ETUFs, national and European sectoral trade unions?
- Links to other official institutions: ECHA, EU-OSHA, national OSH institutes?
- Interest in sharing knowledge and experience across other substances work: EDCs, occupational diseases?
- New nano@etui.org address to collect experiences – safety representatives, trade unions



THANK YOU!

<http://www.etui.org/>

<http://www.etui.org/Topics/Health-Safety>

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