

ELECTRONIC SUPPORT MATERIAL 5

Focus group questionnaire

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From Risk Perception to Risk Governance in Nanotechnology: A Multi-Stakeholder Study

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Questionnaire for the Focus Groups

Please indicate to what extent you agree with the following aspects or which direction you lean towards. Please take enough time to complete.

Topic 1 - Perception and acceptance

	<i>Agree with</i>					
						
My knowledge of nanotechnologies is high. [T1V1]	☐	☐	☐	☐	☐	My knowledge of nanotechnologies is low.
Public knowledge of nanotechnologies is high. [T1V2]	☐	☐	☐	☐	☐	Public knowledge of nanotechnologies is low.
Nanotechnology has a positive connotation for me. [T1V3]	☐	☐	☐	☐	☐	Nanotechnology has a negative connotation for me.
Nanotechnology has a positive connotation in the public opinion. [T1V4]	☐	☐	☐	☐	☐	Nanotechnology has a negative connotation in the public opinion.
Nanotechnology is an option for the future. [T1V5]	☐	☐	☐	☐	☐	Nanotechnology is no option for the future.
Nanotechnology offers alternative technologies a chance. [T1V6]	☐	☐	☐	☐	☐	Nanotechnology leaves alternative technologies no chance.
The previous technologies are sufficient. [T1V7]	☐	☐	☐	☐	☐	The previous technologies are not sufficient.
Investing money into research for Nanotechnology is justified. [T1V8]	☐	☐	☐	☐	☐	Investing money into research for Nanotechnology is not justified.
Nanotechnology is justifiable. [T1V9]	☐	☐	☐	☐	☐	Nanotechnology is not justifiable.

The pros and cons of nanotechnology need to be better balanced. [T1V10]	☐	☐	☐	☐	☐	The pros and cons of nanotechnology have sufficiently been balanced.
Nanotechnology is a miracle cure. [T1V11]	☐	☐	☐	☐	☐	Nanotechnology is no miracle cure.
Nanotechnology is the "future technology of the 22nd century". [T1V12]	☐	☐	☐	☐	☐	Nanotechnology is not the "future technology of the 22nd century". [T1V12]
Nanotechnology is a symbol of progress. [T1V13]	☐	☐	☐	☐	☐	Nanotechnology is not a symbol of progress.
Technology in general means "economic advancement" for me. [T1V14]	☐	☐	☐	☐	☐	Technology in general does not mean "economic advancement" for me.
We are responsible for future generations. [T1V15]	☐	☐	☐	☐	☐	We are not responsible for future generations.
Society needs the development of new technologies. [T1V16]	☐	☐	☐	☐	☐	Society doesn't need the development of new technologies.
Technology is a solution for problems. [T1V17]	☐	☐	☐	☐	☐	Technology is not a solution for problems.
	1	2	3	4	5	

Topic 2: Purchase decision and use

I would buy the following products if they include nanotechnology/material...

	Yes, in any case No, under no circumstances ←————→					Comments
Textiles (Outdoor-/Sportswear, Socks, Underwear, Trousers, Sweater, ...) [T2V1]	☐	☐	☐	☐	☐	
Home decoration, Interior design products (sofa, chairs, mattresses, fabric covers, bedding, ...)[T2V2]	☐	☐	☐	☐	☐	
Cosmetics (Lipstick, Sunscreen, Cosmetic powder, Eyeliner, Tooth paste, ...) [T2V3]	☐	☐	☐	☐	☐	
Toys (electronical appliances, Drones, ...) [T2V4]	☐	☐	☐	☐	☐	
IT/Electronics (TV, Mobile Phones, Cameras, Headphones, Computer, ...) [T2V5]	☐	☐	☐	☐	☐	
Appliances (coffee maker, iron, refrigerator, ...) [T2V6]	☐	☐	☐	☐	☐	
Baby accessories (water bottles, baby carriages, child seats, electronic devices,) [T2V7]	☐	☐	☐	☐	☐	
Food packaging (plastic polymers, plastic containers, ...) [T2V8]	☐	☐	☐	☐	☐	
Foods (Syrup, Ketchup, Drinks, Sweets, ...) [T2V9]	☐	☐	☐	☐	☐	
Cleaning / Care Products (Shoe Impregnation, Floor Care, Household Maintenance, ...) [T2V10]	☐	☐	☐	☐	☐	

Paints (varnishes for cars, façade color, ...) [T2V11]	☐	☐	☐	☐	☐	
Components for cars / means of transport (fenders, mirrors, dashboard coating, ...) [T2V12]	☐	☐	☐	☐	☐	
Medical products (tablets, vitamins, bandages, spray, ...) [T2V13]	☐	☐	☐	☐	☐	
Building materials (floor covering, glass panes, steel parts, ...) [T2V14]	☐	☐	☐	☐	☐	
Environmental application (water purification, ...) [T2V15]	☐	☐	☐	☐	☐	
Garden (insect repellent, pesticides, ...) [T2V16]	☐	☐	☐	☐	☐	
Energy sector (solar panels on houses, ...) [T2V17]	☐	☐	☐	☐	☐	
Other _____ — (Provide more ideas) [T2V18]	☐	☐	☐	☐	☐	
	[1]	[2]	[3]	[4]	[5]	

Topic 3: Effects

Nanotechnology will improve the future

	Yes, in any case No, under no circumstances					Comments
						
Quality / Comfort of Products [T3V1]	☐	☐	☐	☐	☐	
Performance /Product Efficiency [T3V2]	☐	☐	☐	☐	☐	
Longevity of products [T3V3]	☐	☐	☐	☐	☐	
Own health / family [T3V4]	☐	☐	☐	☐	☐	
Hygiene [T3V5]	☐	☐	☐	☐	☐	
Environment [T3V6]	☐	☐	☐	☐	☐	
Security of society [T3V7]	☐	☐	☐	☐	☐	
Economic Development [T3V8]	☐	☐	☐	☐	☐	
Overall Quality of Life [T3V9]	☐	☐	☐	☐	☐	
Future of the following generations [T3V10]	☐	☐	☐	☐	☐	

I see a great benefit from nanotechnologies for

	Very likely Highly unlikely					Comments
Health / Medicine [T3V11]	☐	☐	☐	☐	☐	
Agriculture [T3V12]	☐	☐	☐	☐	☐	
Food [T3V13]	☐	☐	☐	☐	☐	
Food packaging [T3V14]	☐	☐	☐	☐	☐	
Engineer / Construction [T3V15]	☐	☐	☐	☐	☐	
Transport / Mobility [T3V16]	☐	☐	☐	☐	☐	
Cosmetics [T3V17]	☐	☐	☐	☐	☐	
Textiles [T3V18]	☐	☐	☐	☐	☐	
Colors [T3V19]	☐	☐	☐	☐	☐	
Electronics [T3V20]	☐	☐	☐	☐	☐	
Energy sector [T3V21]	☐	☐	☐	☐	☐	
Environment [T3V22]	☐	☐	☐	☐	☐	

Topic 4: Risk

	I agree ← →					
The pro-position (in the video) is believable. [T4V1]	☐	☐	☐	☐	☐	The pro position (in the video) is not believable.
The contra-position (in the video) is credible. [T4V2]	☐	☐	☐	☐	☐	The contra position (in the video) is not believable.
The advantages of nanotechnology predominate. [T4V3]	☐	☐	☐	☐	☐	The disadvantages of nanotechnology predominate.
Nanotechnology is easy to control. [T4V4]	☐	☐	☐	☐	☐	Nanotechnology is unmanageable.
An assessment of the risks is possible. [T4V5]	☐	☐	☐	☐	☐	An estimation of the risks is not possible.
The uncontrolled spread of small particles in the environment is a problem. [T4V6]	☐	☐	☐	☐	☐	The uncontrolled spread of small particles in the environment is not a problem.
In the area of risks of nanotechnology one should continue research. [T4V7]	☐	☐	☐	☐	☐	In the area of risks of nanotechnology one should not continue research.
Nanotechnology will have a positive effect on life over the next 20 years. [T4V8]	☐	☐	☐	☐	☐	Nanotechnology will have a negative effect on life over the next 20 years.
The benefits of nanotechnology are higher than the risk. [T4V9]	☐	☐	☐	☐	☐	The risks of nanotechnology are higher than the risk. [T4V9]

For which areas do you see risks in the production, use or waste products of nanomaterials?

	Low Risks		High Risks		Comments
Public Health [T4V10]	☐	☐	☐	☐	
Workers' Health / Safety [T4V11]	☐	☐	☐	☐	
Consumer Health [T4V12]	☐	☐	☐	☐	
Animal Health [T4V13]	☐	☐	☐	☐	
Environmental Protection [T4V14]	☐	☐	☐	☐	
Economic Aspects (Investments, Insurance, Labor Market, ...) [T4V15]	☐	☐	☐	☐	
Ethical and Social Aspects (Individual Rights and Freedoms, Effects on Quality of Life, Justice, ...) [T4V16]	☐	☐	☐	☐	

How do I assess the risks of nanomaterials?

	Risks are very likely		Risks are highly unlikely		Comments
Skin contact [T4V19]	☐	☐	☐	☐	
Inhalation [T4V20]	☐	☐	☐	☐	
Waste products of nanomaterial [T4V21]	☐	☐	☐	☐	
Contact at work [T4V22]	☐	☐	☐	☐	
Laboratory experiments [T4V23]	☐	☐	☐	☐	
Accidents in the environment [T4V24]	☐	☐	☐	☐	
Insufficient information on toxicity on toxicity [T4V25]	☐	☐	☐	☐	
Test results from research [T4V26]	☐	☐	☐	☐	

	[1]	[2]	[3]	[4]	[5]	
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Where do I receive information for assessing the risks or benefits of nanotechnologies? (For example: TV, radio, newspaper, internet, neighbours, work place, experiences ...)

Answer: [T4V27]

Have you compared nanotechnology with other technologies to gauge the risks? If so, with which technology / usage (for example: nuclear energy, genetic engineering, chemicals, radioactivity ...?)

Answer: [T4V28]

Topic 5: Information Procurement

	Agree with 					
I have sufficient information about the risks of nanotechnologies. [T5V1]	☐	☐	☐	☐	☐	I have too little information about the risks of nanotechnologies.
Consumers should be involved in the development of nano-products. [T5V1a]	☐	☐	☐	☐	☐	Consumers should not be involved in the development process.
Involving consumer organizations in the development of nanoproducts [T5V1b]	☐	☐	☐	☐	☐	Consumer organizations should not be involved.

As a consumer, I need the following information about nanotechnology

	Yes, in any case No, under no circumstances ←→					Comment
Indication of type and application of nanomaterials in the product (label, specifications) [T5V2]	☐	☐	☐	☐	☐	
Presentation of ingredients on the packaging [T5V3]	☐	☐	☐	☐	☐	
Information on safe handling [T5V4]	☐	☐	☐	☐	☐	
Access to a product register where I can see if the product contains nanomaterials. [T5V5]	☐	☐	☐	☐	☐	
Potential health risks from the occurrence of nanomaterials [T5V6]	☐	☐	☐	☐	☐	
Potential Environmental Damage Risks May Result from Nanomaterial Occurrence [T5V7]	☐	☐	☐	☐	☐	

I would like to receive information on nanotechnologies through

	Yes, in any case No, under no circumstances 					Comment
Consumer Organizations [T5V8]	☐	☐	☐	☐	☐	
Public Institution, Authority [T5V9]	☐	☐	☐	☐	☐	
Environmental Organizations [T5V10]	☐	☐	☐	☐	☐	
Manufacturer / Industry [T5V11]	☐	☐	☐	☐	☐	
Scientific Institution (E.g. Universities, Independent Research Facilities) [T5V12]	☐	☐	☐	☐	☐	
Other..... [T5V13]	☐	☐	☐	☐	☐	

I gather information on nanotechnologies through

	Mostly through Never through 					Comment
Internet [T5V14]	☐	☐	☐	☐	☐	
Newspaper [T5V15]	☐	☐	☐	☐	☐	
TV, Radio [T5V16]	☐	☐	☐	☐	☐	
Smartphone App, Social Media [T5V17]	☐	☐	☐	☐	☐	
Blogs, Discussion Forums on the Internet [T5V18]	☐	☐	☐	☐	☐	
Neighbors / Friends [T5V19]	☐	☐	☐	☐	☐	
Labels, labeling of products [T5V20]	☐	☐	☐	☐	☐	
Other [T6V21]						
	[1]	[2]	[3]	[4]	[5]	

Socioeconomic information

Note: This and all other information is strictly confidential and will only be used for statistical purposes!

When were you born? [Sv1age]

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What is your current job description / profession? [Sv2]

What is your Gender? [Sv3]

- ☐ male [1]
- ☐ female [2]

Please provide information about your marital status: [Sv4]

- ☐ Single [1] ☐ Other [4]
- ☐ Widowed [3]
- ☐ Married [2]

What is your highest general education qualification? [Sv5]

- ☐ finished school without graduation [1]
- ☐ elementary or secondary school [2]
- ☐ Middle School or Polytechnic High-School with completion of the 10th grade [3]
- ☐ High-School [4]
- ☐ University degree [5]
- ☐ Other degree, namely the following [Sv5a] _____ [6]

Thank You very much!