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COMPLETE

Collector: Nano Consult - Non-Industry (Web Link)
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PAGE 2: Section I - Identification

Q1: Please provide the following details (*compulsory):	
Your name:	Laurel Berzanskis
Name of organisation* (if applicable):	Health Care Without Harm Europe
Town/City:	Brussels
Country*:	Belgium
E-mail address:	
Transparency Register ID number (if applicable):	57514749088-82
Q2: Please indicate if you are responding to this questionnaire on behalf of/as:	d) a consumer organisation/trade union/environmental organisation/non-governmental organisation
Q3: Received contributions may be published on the Commission's website, with the identity of the contributor. Please state your preference with regard to the publication of your contribution:	My contribution may be published under the name indicated
Q4: We might need to contact you to clarify some of your answers. Please state your preference below:	I am available to be contacted

PAGE 3: Section III – Problem definition and objectives

Q5: Please rate the importance of the following objectives on a scale between 1 (not important at all) and 5 (very important).

a) Provide decision makers, regulatory authorities and professional users with information that allows for an appropriate response to health or environmental risks of nanomaterials	5
b) Provide consumers with relevant information on products containing nanomaterials on the market	5
c) Maintain competitiveness and innovation of businesses bringing nanomaterials or products containing nanomaterials to the market (including SMEs)	3
d) Ensure consumer trust in products containing nanomaterials	5
e) Ensure the availability of relevant information on the presence of nanomaterials or products containing nanomaterials on the market	5
f) Ensure the proportionality of the information requirements and the associated costs and administrative burden.	3
g) Protect confidential business information	2
Please provide additional comments	It is necessary to gather information on products containing nanomaterials on the European market and generate additional information that decision makers can use to create an appropriate, effective and efficient response to health and environmental risks posed by nanomaterials. Depending upon the information made public, the registry could also allow consumers to feel confident in their decisions to purchase and use products containing nanomaterials.

Q6: To what degree (from 1 - not at all to 5 - fully) does the current legislative framework (including the REACH and CLP Regulations and product-specific legislation) and the currently available databases (including the JRC web platform, see http://ihcp.jrc.ec.europa.eu/our_databases/web-platform-on-nanomaterials) meet the following objectives?

a) Provide decision makers, regulatory authorities and professional users with information that allows for an appropriate response to health or environmental risks of nanomaterials	2
b) Provide consumers with relevant information on products containing nanomaterials on the market	2
c) Maintain competitiveness and innovation of businesses bringing nanomaterials or products containing nanomaterials to the market (including SMEs)	3
d) Ensure consumer trust in products containing nanomaterials	2
e) Ensure the availability of relevant information on the presence of nanomaterials or products containing nanomaterials on the market	1
f) Ensure the proportionality of the information	2

requirements and the associated costs and administrative burden.	
g) Protect confidential business information	5
Please provide additonal comments	The current legislative framework does not provide decision makers and consumers with adequate information on nanomaterials. For example, REACH does not specifically address nanomaterials, and nanomaterials are often not distinguished from chemically identical bulk substances in REACH registration dossiers. (Though nonbinding ECHA guidance recommends separate registration, REACH does not require it). Many products that contain nanomaterials are not registered under REACH as they fall below the 1tonne/year/manufacturer or importer threshold. While some sector specific legislation provides for labelling of products containing nanomaterials, such as the biocidal products regulation and the cosmetics regulation, there are no systemic labelling requirements upon which consumers can rely. Inconsistency between regulatory frameworks creates confusion. Consumers cannot know whether the products they buy contain nanomaterials, and may become suspicious to discover on their own that such products contain nanomaterials. A registry would create transparency and ensure consumer trust in the products they buy, enabling them to make informed decisions and decide for themselves whether to be exposed to the potential health and environmental risks. Although some data on nanomaterials is available through the sectorial legislation, a consumer is unlikely to know how to find it, or know that only some products containing nanomaterials are labelled. Information on nanomaterials that is available under the current legislative framework is not presented in a way that consumers can understand.

Q7: To what extent do you agree with the following statements from 1 (strongly disagree) to 5 (strongly agree):

a) The current level of available information on the presence of nanomaterials and products containing nanomaterials on the market is insufficient for an adequate response to health and environmental risks	5
b) The current level of available information on the presence of nanomaterials and products containing nanomaterials on the market is insufficient for informed consumer choice	5
c) The current level of available information on the presence of nanomaterials and products containing nanomaterials on the market is detrimental to consumer trust	5
d) The available information on the presence of nanomaterials and products containing nanomaterials on the market is presented in an incoherent or ineffective way	4
e) The establishment of national registries and notification schemes causes market fragmentation and hampers trade within the internal market	4
Please provide additional comments	A European level registry would better promote the functioning of the internal market as it would require a single registration for products containing nanomaterials according to a single set of rules, as opposed to multiple registrations with differing applicability and information requirements. The registry would also provide other benefits outlined in Section III, question 2 above.

PAGE 4: Section IV – Health and environmental aspects

Q8: With regard to health and environmental hazards and risks of specific nanomaterials/types of nanomaterials, please tick the relevant boxes:

I am aware of health and/or environmental hazards of specific nanomaterials/types of nanomaterials

,

I am not aware of any classified nanomaterials,

I am not aware of any DNELs/PNECs/OELs set for specific nanomaterials/types of nanomaterials

,

Please explain your responses (if any, please report the nanomaterials, the health and/or environmental hazards, any relevant classification, any DNELs/PNECs/OELs, any exposure and in which condition):
Scientific studies suggest that nanomaterials can pose threats to human health and the environment. HEALTH HAZARDS In vitro and in vivo toxicological studies have shown that some nanomaterials (carbon based nanomaterials, metal based nanomaterials and dendrimers) have cytotoxic, genotoxic, carcinogenic and reprotoxic behaviour and can therefore pose potential risks to human health. The purposed mechanism is

cellular damage through oxidative stress and induction of inflammation (1). Due to their special properties (chemical reactivity and bio-logical mobility) their toxicity can manifest locally at the site of exposure (skin, lungs or gastrointestinal tract) or systemically in distal sites (liver, cardiac tissue, heart, kidneys). Pulmonary toxicity Studies prove that nanomaterials can easily reach the lungs due to their small size and can inflict pulmonary damage due to pro-inflammatory effect. A study in mice showed that after inhalation, carbon nanotubes in-duced an inflammatory effect with a decline in pulmonary function and enhanced susceptibility towards infec-tion (2). Another study on mice showed that single wall carbon tubes have more pulmonary toxicity than car-bon black and quartz, which are already considered serious occupational health hazards (3). Nanotubes intro-duced into the abdominal cavity of mice provoked inflammation and formation of granulomas similar to those caused by exposure to asbestos (4), a substance that has been regulated in worker safety programs for many years. Rats exposed to titanium dioxide have also presented inflammation and epithelial damage (5). Other organ toxicity Nanomaterials can cause cytotoxic effects due to oxidative stress and accumulation. A study on cell cultures showed cell death after treatment with carbon fullerenes (6). Metal oxides caused liver damage after accumu-lation in mice (7). Dendrimers have known toxic effects on cells due to their surface capacities and have been functionalized to reduce this effect (8). Quantum dots that contain cadmium selenium and zinc were found to accumulate in the liver, spleen and kidney of monkeys (9). A study of quantum dots done on a liver model proved the reactive substances making up the inorganic core of quantum dots present acute toxicity to hepatocytes, the main tissue of the liver (10). Antimicrobial resistance Bacteria can develop resistance to the antimicrobial effects of nanosilver. A study in a hospital environment shows that Bacillus sp can develop resistance to nanosilver (11). This is particularly concerning as nanosilver is used extensively in the medical environment today, and the Bacillus species include Bacillus anthracis that causes anthrax and Bacillus cereus that causes food poisoning. ENVIRONMENTAL HAZARDS An unknown quantity of nanomaterials is emitted into the environment and numerous studies show they can inflict toxic behaviour on plants and animals. Beneficial soil microbe toxicity Studies show that nanogold can decrease colony formation of microbial communities in soil that are essential to plant growth (12). Growth inhibition in plants Silicon dioxide and nanosilver have been found to decrease the growth rate of fresh algae (13), (14). Carbon nanotubes have been shown to inhibit the root elongation of different vegetables (including tomato, lettuce, onion, cabbage, carrots) depending on functionalization (15). Silver nanoparticles have been proven to inhibit the seedling growth rate of common grass (16). Nano

seedling growth rate of common grass (16). Nano iron oxides have showed accumulation in hydroponically grown pumpkin plants (17). Aquatic and soil organism toxicity A study on fathead minnow embryos demonstrated that nanosilver could lead to a reduction of the number of embryos (18). Several metal oxides showed acute toxicity in experimental test organisms and cells (19). Car-bon nanoparticles studies on earthworms showed that in they were responsible for slowing population growth, increasing mortality and damaging tissue (20). References

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Q9: With regard to the past and current use of nanomaterials (tick the relevant box):

I am not aware of any health and/or environmental incidents which have occurred

,

Please explain (if any, please report the events and any scientific publication):
As explained in Section IV, question 1 above, in vitro and in vivo toxicological studies have shown that some nanomaterials can pose potential risks to human health and the environment.

Q10: The establishment of an EU nanomaterial registry (tick the relevant box):

Would significantly contribute to reducing the health and/or environmental risks related to the use of nanomaterials

,

If appropriate, please explain further:
The registry would contribute to reducing the health and/or environmental risks related to the use of nanomaterials, as it would provide an overview of exposure and emissions of nanomaterials across all sectors, and inform future policy making. A registry would allow for the prioritization of regulatory action and research funding based on data that raise concerns, such as wide dispersive use, high tonnages, overuse of substances that contribute to antimicrobial resistance and other information that the current regulatory framework does not provide. Furthermore, the availability of registry information to companies would help improve risk management and hence reduce health and environmental risks related to the use of nanomaterials. A registry would also allow for traceability of products containing nanomaterials should urgent health or environmental problems arise, and hence can serve as a guarantee for the products already on the market.

PAGE 5: Section V – Consumer trust

Q11: In case information on the presence of nanomaterials in specific products were made available, what impact do you think this would have on consumers? (Please tick all that would apply)

a) They would be more inclined to purchase those products

,

b) They would try to avoid those products,

Please explain:
It seems difficult to assume a homogenous reaction across the public of the 28 Member States. Some people would be more interested in the benefits of nanotechnology and would be more inclined to purchase those products. Others would be wary and would avoid purchasing those products. Labelling and product information would help solve the existing information asymmetry and allow consumers to make informed decisions about the products they purchase.

Q12: Do you believe that the public availability of information on the presence of nanomaterials in products would be likely to…(choose one of the following answers)	b) have no significant impact, Comments: Overall there would likely be no significant impact on the market for concerned products. Public availability of information could increase interest in nanomaterials among some consumers, and could have a positive effect on the market for the concerned products. Other consumers might avoid products containing nanomaterials if they are concerned about the possible health and environmental risks, if they feel confused as to why such information was not disclosed sooner, or if they feel the government does not adequately regulate such products. More comprehensive information in any case will make all consumers more aware about products on the market, as they will be given the choice to expose themselves to such products or not.

PAGE 6: Section VI - Innovation and competitiveness

Q13: With regard to innovation, do you believe that information on nanomaterials and products containing nanomaterials that could be gathered in a nanomaterial registry would…(choose one of the following answers)	a) stimulate innovation (e.g. through increased consumer trust, increased awareness on nanomaterials) , Comments: The transparency created by a registry has the potential to stimulate innovation. In addition to increasing consumer trust, awareness, and perhaps demand for nanotechnology-enabled products, an EU-level registry would promote the functioning of the internal market by removing any potential market distortion caused by differing regulatory requirements for national registries. An EU-level registry would be less of a burden for small and medium businesses, and money that would have been spent on compliance with differing national registries could go into innovation. The registry could further stimulate innovation and development of safer products containing nanomaterials, especially if unsafe and polluting products are uncovered by the reporting obligations of the registry. These safer products could find markets and be competitive in the EU and beyond.
Q14: With regard to competitiveness of EU companies manufacturing nanomaterials or products containing nanomaterials, do you believe that information on nanomaterials and products containing nanomaterials that could be gathered in a nanomaterial registry would...(tick all that apply)	a) stimulate intra-EU competitiveness, b) enhance the competitiveness of European companies against extra-EU companies , Please explain Please see above, section VI, question 1.

PAGE 7: Section VIII – Possible options and exemptions

Q15: What would be the added value of a notification per use (i.e. for each mixture/article) compared to a notification per substance? – Please consider the usefulness of the information for public authorities, downstream user companies, workers and consumers.

A registry requiring notification per use would have the most added value and would be most useful for public authorities, downstream users, workers and consumers. Complementing the registry with labelling obligations for products containing nanomaterials and a tracking number would make the system even more effective for traceability purposes.

Public authorities – a registry requiring notification per use could reveal the total number and range of products containing nanomaterials on the market. Public authorities would then be able to better understand the exposure and emissions and create risk management methods to mitigate health and environmental effects. Public authorities could also use the registry information for enforcement purposes, such as crosschecking environmental permits, product controls, or marketing claims. A registry requiring notification per use would allow for traceability in the event of a public health or environmental emergency or product recall, and would inform decision makers on risk assessments and risk management.

Downstream user companies – A registry requiring notification per use would force downstream user companies to inquire about the substances in their products and would improve supply chain communication, especially where products are not regulated under REACH. Knowing that products contain nanomaterials and understanding potential exposure pathways allows companies to better manage associated risks.

Workers – A registry requiring notification per use would allow workers to know that products they work with contain nanomaterials, and better understand where exposure may occur. Depending upon the level of detail required in the registry, a notification by use would allow for a better understanding of risk assessment and management, and hence could improve proper use and handling. Trade unions will have better information to create and support demands for safer work environments.

Consumers – A registry requiring notification per use would allow consumers to look up whether specific products contain nanomaterials, how the nanomaterials are incorporated and what their purpose is. Consumers can learn where and how nanotechnology is improving products and make more informed purchasing decisions.

Q16: Which actors along the supply chain should be subject to notification requirements? (tick all that apply):

a) Manufacturers of nanomaterials,

b) Importers of nanomaterials,

c) Downstream users (e.g. re-formulators, manufacturers of products containing nanomaterials)
,

d) Distributors to professional users (e.g. wholesalers)
,

e) Distributors to consumers (e.g. retailers),

Please explain:
Subjecting actors along the supply chain to notification requirements would document all handling and use of nanomaterials and hence would allow for traceability in case of threat to human health or the environ-ment. Understanding the production chain would also allow for a lifecycle assessment of products containing nanomaterials to ensure that possible impacts can be systemically discovered.

Q17: The following should be subject to notification requirements (tick all that apply):

a) Substances,

b) Mixtures containing nanomaterials,

c) Articles with intended release of nanomaterials

,

d) Articles containing nanomaterials without intended release

,

Please explain:
Even if release is not intended articles can release nanomaterials during use and other stages of the product life cycle. Therefore the intention to release or not should not determine exemption from registry notification. For example, engineered nanomaterials (ENM) are extensively used today in façade coatings of textiles (1). Although nanomaterials are considered safe if they are embedded in a matrix, data indicates that nanomaterials may present unintended release due to the exposure to environmental conditions. A study investigating the stability of carbon nanotubes from polymeric nanocomposite textiles showed release of ENM from the textile in the presence of moisture, mechanical stress, and especially UV radiation such as sun exposure (2). Another study showed release of nanosized titanium dioxide particles in 5 out of 6 textiles tested during washing (3). ENM released from geotextiles can end up in soils and ENM released from clothing can come into contact with human skin and after washing enter the environment. 1. Som C, Wick P Fau - Krug H, Krug H Fau - Nowack B, Nowack B. Environmental and health effects of nanomaterials in nanotextiles and facade coatings. Environ Int. 2011;37(1873-6750 (Electronic)):1131-42. 2. Ging J, Tejerina-Anton R, Ramakrishnan G, Nielsen M, Murphy K, Gorham JM, et al. Development of a conceptual framework for evaluation of nanomaterials release from nanocomposites: environmental and toxicological implications. Sci Total Environ. 2013;473-474(1879-1026 (Electronic)):9-19. 3. Windler L, Lorenz C, von Goetz N, Hungerbühler K, Amberg M, Heuberger M, et al. Release of Titanium Dioxide from Textiles during Washing. Environ Sci Technol. 2012;46(15):8181-8.

Q18: Is there a need to exempt certain types of nanomaterials?	No, all kinds of nanomaterials should be subject to notification obligations , If yes, which types should be exempted and why? (in terms of specific properties, available knowledge, absence of hazards, etc.) Although individual products may have low emissions or be relatively safe for a consumer to use, it is important to understand the total emissions and total potential health and environmental impact of the complete life cycle of all products containing nanomaterials on the market in the EU. Furthermore, exempting certain types of nanomaterials would create consumer confusion about whether the absence of a product in the registry means there are no nanomaterials.
Q19: Is there a need to exempt certain uses of nanomaterials?	No, all uses of nanomaterials should be subject to notification obligations , If yes, which uses should be exempted and why? (in terms of specific exposure scenarios, available knowledge, absence of hazards, etc.) While some uses or nanomaterial types may be of more immediate concern, at this time it is not appropriate to create exemptions given the overall uncertainty of the total impact of nanomaterials on human health and the environment throughout the lifecycle. For public authorities, exemptions would not allow for a complete picture of the products containing nanomaterials on the market. For consumers and workers, exempting certain uses would create consumer confusion about whether the absence of a product means there are no nanomaterials. For companies, exemptions can cause regulatory uncertainty, as they would have to try and understand whether they fall into the scope or not. Therefore, the simplest and most straightforward approach for all parties would be to have no exemptions.

PAGE 8: Section IX – Nanomaterials Observatory

Q20: If a Nanomaterials Observatory is established instead of an EU-wide registry, what type of information should be collected? (please tick all that apply)

a) Information from existing notification systems,

b) Information from market studies on nanomaterials and products containing nanomaterials

,

c) Information on the use of nanomaterials across Europe

,

d) Information concerning products containing nanomaterials

,

e) Information on the hazards and risks of nanomaterials

,

f) Other (please explain):
Where available, information on the toxicity and ecotoxicity derived from testing on substances in the nano-form should be provided. However, even providing the information listed above affords no benefit if consumers, workers and authorities do not know precisely what products contain nanomaterials. A registry is a better method to ensure transparency.

Q21: How should the information in a Nanomaterials Observatory be presented in order to reach the consumers, workers and authorities?

To be useful to consumers and workers, there should be a search function where users can search for information by product, product type, substance and manufacturer.
For authorities, an aggregation of data would be useful to inform policy making. If possible, a listing of the most hazardous and most ecotoxic substances (known thus far) would help decision makers know where there may be concerns.
To make the database more useful, it could include a function allowing for public comment and notification (as with the pharmacovigilance system). This would allow consumers and workers to notify individual health effects with specific products or substances, which can then be evaluated and substantiated by authorities.
A registry of products containing nanomaterials would be a more appropriate solution.

PAGE 9: Section X - Potential use and benefits of a nanomaterial registry

Q22: In what ways could the information on nanomaterials from registries be potentially useful (tick all that apply):

a) Risk assessment and/or risk management,

b) Enforcement of worker protection,

c) Promotion of safe use of nanomaterials in products

,

d) Development of strategies to ensure the safe use of nanomaterials

,

e) Informed purchasing decisions by consumers,

f) General education of the public

Q23: Please give a justification for your views (presented in the previous question) and describe which data would be necessary to allow the desired use (e.g. would information on substances alone be enough for informed consumer purchase decisions, or would this require information for each concerned product):

each concerned product).

Information on nanomaterials from the registry could fulfil a number of goals efficiently if the notification requirements are broad enough. To ensure the registry is useful for all parties, the notification must require robust information. In all cases, it would be necessary to register information on the product and brand name, quantity, and substance information, such as identification, trade name, chemical name, formula, physical form and properties. It would also be necessary to report the function of the nanomaterial (whitener, preservative, antimicrobial, etc.), manner of inclusion (solid, liquid, aerosol, etc.), how it is incorporated into the product (what part or parts of the product contain nanomaterials), and in what concentration. A list of Member States where product is sold, and the manufacturer and supply chain actors would also be appropriate. Information on the safe use and disposal, known adverse health effects, and available information on the toxicology or ecotoxicology of the substance in the nanoform would also help provide a complete picture.

The registry containing this information could be beneficial for all uses listed above:

Risk assessment and/or risk management – A registry would demonstrate which uses and/or substances are most widespread and which may be most likely to pose a risk. Data regarding the quantity of nanomaterials being used in products would provide crucial information about which workers are exposed and how would be helpful in assessing the risks and developing risk management measures. The same information would help understand where emissions occur and how to control the environmental risks of such emissions. Registration of substance and use, or of product and substance, along with the substance information, the quantity of nanomaterials, information on safe use and disposal, the concentration of nanomaterials, and the actors of the supply chain would provide a base of information from which decision makers and workers can prioritize actions and develop risk management assessments and measures.

Enforcement of worker protection – A registry would gather information on what products/substances are manufactured and by whom, and hence where enforcement efforts should be focused. To fill this aim, information is needed on the exposure, the manufacturer of the substance and product, and other actors along the supply whose workers are exposed in any way to nanomaterials. It would be necessary to understand the safe use and disposal, any known adverse health effects, and available information on the toxicology or ecotoxicology of the substance in the nanoform.

Promotion of safe use of nanomaterials in products – A registry would help raise consumer awareness of nanomaterials in products, and enable consumers to properly use products in a way that minimises their exposure to nanomaterials and minimises emissions of nanomaterials into the environment. In order for the registry to fulfil this aim, it would be necessary to know the function of the nanomaterial (whitener, preservative, antimicrobial, etc.), manner of inclusion (solid, liquid, aerosol, etc.), how it is incorporated into the product (what part or parts of the product contain nanomaterials), and any data on safe use and disposal of the final product. Providing available information on known adverse health effects, and the toxicology or ecotoxicology of the substance in the nanoform would further promote the safe use of nanomaterials in products.

Development of strategies to ensure the safe use of nanomaterials – A registry would create a base of information from which authorities can monitor products, watch for patterns, and prioritize regulatory action, where necessary. Information necessary to enable informed, efficient, and effective regulatory action includes: substance identity, quantity of nanomaterials, uses, actors along the supply chain, whether adverse health effects have already been reported, whether substance is registered under REACH, any safety guidance already developed, available toxicological and ecotoxcological studies done on the nanoform of the substance, and any use instructions related to the nanomaterials' content or properties.

Informed purchasing decisions by consumers – A public registry would allow consumers to know which products contain nanomaterials and to make an informed decision about whether they want to use such products, or how they can find other nano-enabled products. The data needed for a registry to be useful to consumers includes: product and brand names, countries where product is sold, and existing toxicological or ecotoxicological data. To allow consumers to make a truly calculated decision whether to be exposed to nanomaterials, information on the function of the nanomaterial (whitener, preservative, antimicrobial, etc.), manner of inclusion (solid, liquid, aerosol, etc.) and how it is incorporated into the product (what part or parts of the product contain nanomaterials) is necessary. Knowing what function or benefit the nanomaterials give to products enables the consumer to make a calculated decision about whether to use the product.

General education of the public – A registry would allow the general public to learn about how nanomaterials are used in products, the proper use and disposal of products containing nanomaterials, and the benefits and risks associated with such products. In order to educate the general public, data would be needed regarding products containing nanomaterials on the market, To allow consumers to make a truly calculated decision whether to be exposed to nanomaterials, information on the function of the nanomaterial (whitener, preservative, antimicrobial, etc.), manner of inclusion (solid, liquid, aerosol, etc.) and how it is incorporated into the product (what part or parts of the product contain nanomaterials), and how to properly use and dispose of products containing nanomaterials is necessary.

products containing nanomaterials is necessary?

Q24: What would be the added value of a European nanomaterial registry beyond the current framework of chemicals legislation, including REACH registration?

A complete overview of nanomaterials on the market is not available through the current framework of chemicals legislation, and the registry could help fill the information gaps. As outlined above, nanomaterials are not always distinguished from bulk substances in REACH registration dossiers, and a registry could provide information specific to the nanoform. The registry could further provide information on substances that fall below the REACH registration threshold of 1T/year/manufacturer or importer. REACH also does not provide information on the specific applications, the nanomaterial concentration, and the quantities of nanomaterials that have been registered together with the bulk substance. A registry could help close these gaps by collecting data specific to nanomaterials, which could then be used to understand the health and environmental risks, where exposure occurs during the full life cycle of the nanomaterial, and how to assess and manage such risks.

Though some sectorial legislation applies to nanomaterials, there is no single resource containing all relevant information on products containing nanomaterials on the market. Therefore, the registry would compile and develop information on nanomaterials for easy monitoring, pattern spotting and analysis by authorities. The registry could generate statistical data across all regulatory instruments, which is necessary to inform regulatory decision making, risk assessment and risk management.
Furthermore, a registry would provide a “one-stop shop” for all information regarding nanomaterials and products containing nanomaterials. Compared to the current framework, this would vastly improve consumers’ and workers’ knowledge of the benefits and risks of nanomaterials.

Q25: Please provide any other comments that you would like to share regarding transparency measures for nanomaterials on the market.

The most efficient and effective transparency measure would be a comprehensive registry for all products containing nanomaterials, with registration per use and which contains no exemptions.