



Closer to the Market (CTTM) Roadmap

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Andreas Falk

BioNanoNet Forschungsgesellschaft mbH (BNN), Austria



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Andreas Falk*¹, Christa Schimpel¹, Andrea Haase³, Benoît Hazebrouck⁴, Carlos Fito López⁵, Adriele Prina-Mello⁶, Kai Savolainen⁷, Adriënne Sips⁸, Jesús M. Lopez de Ipiña¹⁰, Iseult Lynch¹¹, Costas Charitidis¹², Visser Germ¹³

¹ BioNanoNet Forschungsgesellschaft mbH (BNN), Austria

² TNO Research Group Risk Analysis for Products in Development (TNO), The Netherlands

³ Bundesinstitut für Risikobewertung (BfR), Germany

⁴ EU-VRi European Virtual Institute for Integrated Risk Management, Germany

⁵ ITENE – I.Tecnologico, Embalaje, Transporte y Logistica, Spain

⁶ Trinity College Dublin (TCD), Ireland

⁷ Nanosafety Research Centre, Finnish Institute of Occupational Health (FIOH), Finland

⁸ National Institute of Public Health & the Environment (RIVM), The Netherlands

⁹ Nanotechnology Industries Association aisbl (NIA), Belgium

¹⁰ TECNALIA, Spain

¹¹ University of Birmingham, UK

¹² Project Technical Advisor of NanoSafety Cluster, National Technical University of Athens, School of Chemical Engineering, Department III: Materials Science and Engineering, Research Unit of Advanced, Composite, Nano-Materials and Nanotechnology (R-NANO), Greece

¹³ DSM Innovation Center, Sittard, The Netherlands

Further contributors:

Diana Mutz, Bundesinstitut für Risikobewertung, Germany

Tomasz Puzyn, University of Gdansk, Poland

Martie van Tongeren, Institute of Occupational Medicine, Edinburgh, UK

Thomas Zadrocny, PRO-Active sprl, Belgium

Danail Hristozov, GreenDecision srl, University Ca' Foscari Venice, Italy

C.A.M. (Kees) van Gestel, Department of Ecological Sciences, VU Amsterdam, The Netherlands

the following persons contributed to this document, but are not active in their companies any more:

Derk H. Brouwer², Steffi Friedrichs⁹, Sonja Hartl¹

*corresponding author: Andreas.falk@bionanonet.at

Content

Aim:

Speeding up the progress towards market implementation of nanotechnologies

Structure:

- Scope
- Bottlenecks
- Actions proposed (occupational safety, public safety)
- Expected outcome
- Impact



Scope

- Identify best practice and unfulfilled gaps in terms of where and how the scientific/research community, via H2020 and member state funding initiatives, can support the commercialization
- main directions/goals:
 - Setting minimum requirements for nanosafety-related **jobs, skills** and/or **tools**
- CTTM is a plan that matches short-term to long-term goals with specific solutions to help meet those goals (see chapter 2.5 and 2.6)
- CTTM has three major uses:
 - it helps reach a consensus about a set of needs and the technologies required to satisfy those needs;
 - it provides a mechanism to help forecast technology developments; and
 - it provides a framework to help plan and coordinate technology developments

Bottlenecks

- Bottleneck – Solutions – Layer(s) concerned

<p>Lack of nanosafety management systems</p> <p>Lack of integration of nanosafety issues into industry process management systems.</p>	<ul style="list-style-type: none"> • (sector specific) nanosafety management systems, proportional to the respective situation • Standardisation, training and certification • Translate and encapsulate the results of research in a battery of practical methods, strategies and tools for the management of nano-risks • Harmonized standards 	<p>1. Scientific knowledge</p> <p>3. CTTM</p>
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- Chapter 2.5

Actions proposed

- Current challenges – Activities – Timeline

<p>Lack of nanosafety management systems Lack of integration of nanosafety issues into industry process management systems</p>	<ul style="list-style-type: none"> • Reporting/Networking <ul style="list-style-type: none"> ▪ Development, testing, validation and dissemination of holistic, consistent and cost effective RMM • Certification of methods <ul style="list-style-type: none"> ▪ Transferability of RMM methods need to be demonstrated in a second stage, typically by performing round robin exercises 	<p>Short term</p>
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- short term → 2018-2020; long term → 2020 and beyond
- Chapter 2.6

Expected outcome

- Guidance to market actors (e.g. industry, public authorities)
- Best practice
- Standards, technical approvals
- Environmental protection
- Operational certification systems
- Epidemiological studies

Impact

- improvement of efficacy of toxicology studies of nanomaterials and certification of methods
- provide industrial stakeholders and the general public with appropriate knowledge on the risks of nanoparticles and NMs for human health and the environment
- overcome the existing lack of knowledge transfer in the economic and societal point of view
- earlier building of “Business Plan(s)” and integrate in the “Business Plan” the nanosafety dimension of any product supports the better and the faster movement towards the market
- permit industry to “internalise” in their plans the safety issues

> integrate of CTM in “strategic research and innovation agenda” of



BioNanoNet Forschungsgesellschaft mbH

- Our partners offer **scientific expertise**:
 - Molecular imaging, Drug delivery, Molecular targeting, Nanotoxicology, Biobanking, Biosensors, Process analytical technologies (PAC)...
- ...and BioNanoNet adds know-how in...
 - NanoSafety, Safe-by-design, regulatory aspects
 - Coordination, management, communication and dissemination activities



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NANO TOXICOLOGY

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Thank you for your attention



contact: Andreas Falk andreas.falk@bionanonet.at