



Risk Governance of Nanomaterials

3 European projects working together



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Challenge

- Nanotechnology has high economic potential and thereby impacts a broad range of industries and applications
- Interaction of engineered nanomaterials with the living environment is complex and is marked by uncertainty and ambiguity
- Urgent need to develop appropriate risk governance structures, to ensure full potential through trust of all stakeholders



FAST FACTS

Financial resources
H2020 Projects
Budget: € 18.3 million

Duration
January 2019 – February 2023

Collaboration
3 projects, 82 partners
17 EU countries, Brazil, India, Iran, Switzerland, South Africa,
South Korea and USA



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Risk Governance Framework for decision making

Supporting Infrastructure data, tools & instruments

Nano Risk Governance Council



What we work with

- Data and Data structures
 - Risk Tools
 - Risk Framework
 - Risk Governance Council
-
- Case-studies
 - Stakeholders
 - Global input - output



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Data



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Data management

- Review current data structures
- FAIR – EHS data infrastructure
Findable, Accessible, Interoperable and Reusable
- Computation platforms allow easy access to curated data
- Easy uploading, Quality Assessment e.g. Mutual Acceptance of Data (OECD)



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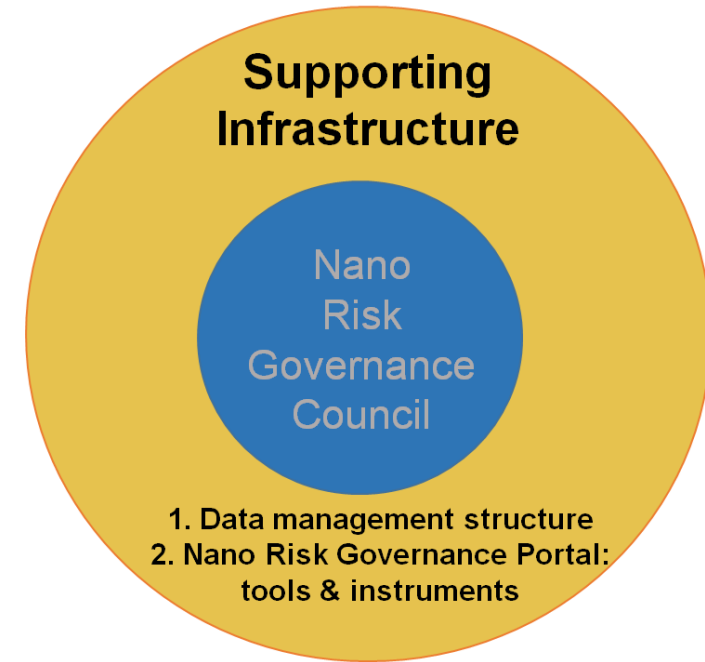
Tools



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Scientific harmonised testguidelines

- Collaboration with Malta Initiative to join (EU) forces
- Nano-specific adaptations of OECD TG/GD
- Dedicated regulatory risk research & experimental work
- Specific endpoints to be addressed: surface chemistry, solubility, reactivity and dustiness of nanomaterials, ecotoxicity and in vitro cytotoxicity and in vitro genotoxicity



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Nano Risk Governance Portal

- Infrastructure integrates academic, industry and regulatory information
- Support decision making framework & council
- Validated state-of-the-art tools
- QA/QC processes and decision tree
- Process for collection and harmonisation of data
- Covers applicability and acceptance (regulatory or industrial)



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Framework



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Nano Risk Governance Framework

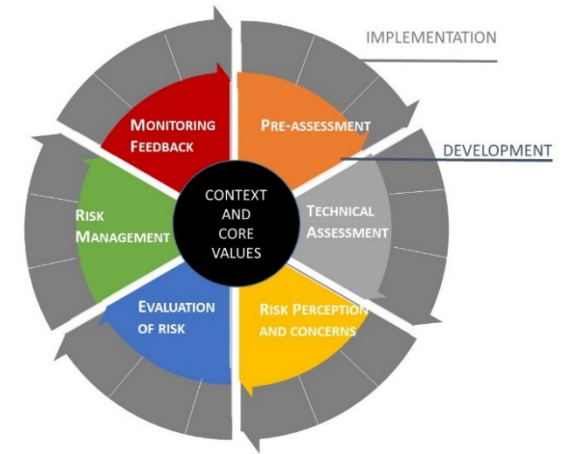
- Decision making framework for Council
- Future-proof based on International Risk Governance Council
- Integrates scientific data and operational tools
- Participative and pro-active role for stakeholders
- Based on existing risk governance infrastructure
- All domains: chemicals, biocides, consumers, food, medicine
- Connecting key organizations and stakeholders (EU and global)



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Risk Governance Framework

- Example - the IRGC Framework provides guidance for early identification and handling of risks, involving multiple stakeholders.
- Distinguishes between understanding a risk
- Deciding what to do about a risk



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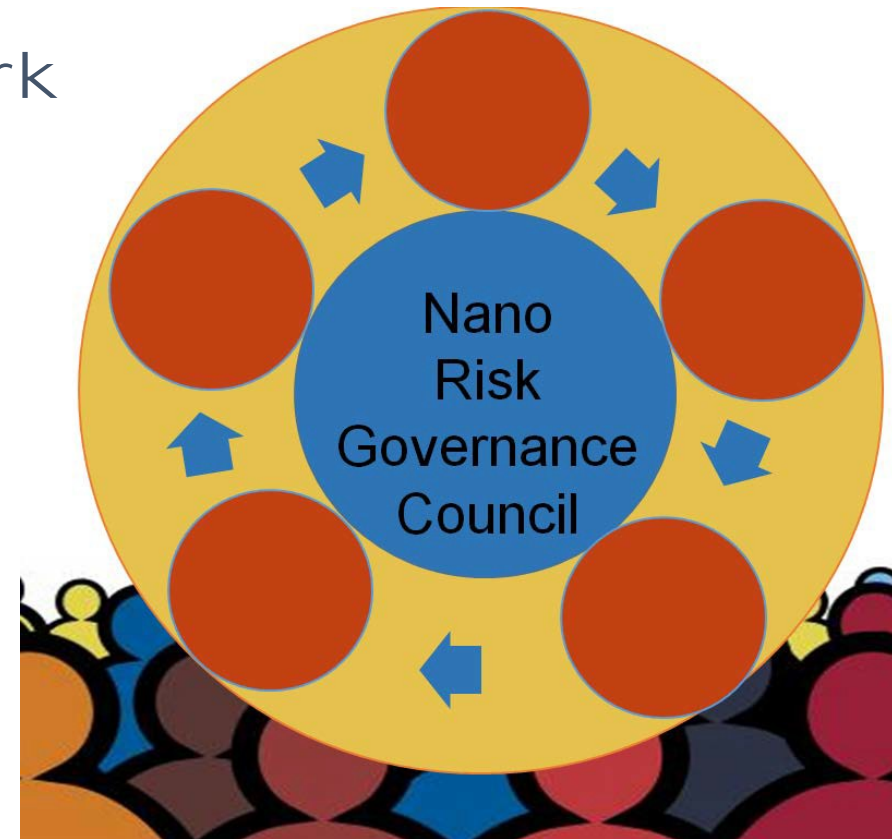
Council



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Nano Risk Governance Council

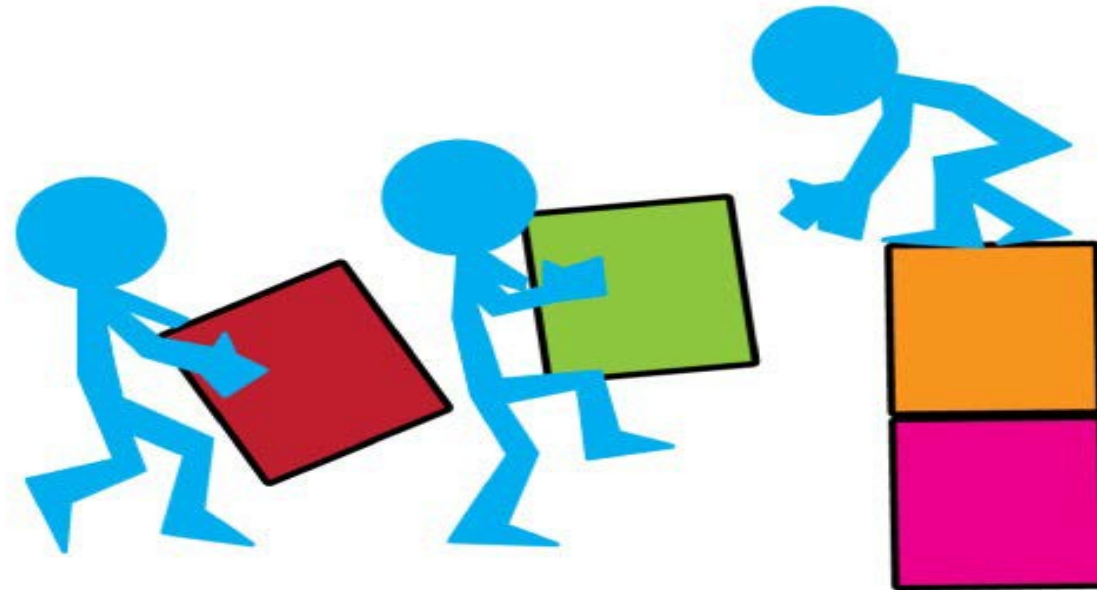
- Governance Council to put the framework into practice
- Overarching, independent, trustworthy body
- Bridge between knowledge generators and decision makers
- Services for all stakeholders



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Outcome

- European Risk Governance Council
- Proof of concept of an effective risk governance process
- Operational Nanotechnology Risk Governance Framework
- Nano Risk Governance Portal
- Demonstrate functioning of the Council



We wish to continue a good way to collaborate within EU-Asia



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Janeck James Scott-Fordsmand
jsf@bios.au.dk

Monique Groenewold
monique.groenewold@rivm.nl

Maria Dusinska
maria.dusinska@nilu.no



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