

# Seventh Framework Programme (FP7)

**Risk assessment of engineered nanoparticles on health and the environment  
NMP-NMP-2007-1.3-2**

## **Long-Term Impact of Engineered Nanoparticles on Environment and Health (nano-LoTioN)**

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**NanoHub**

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# Risk assessment of engineered nanoparticles on health and the environment – Topics to be addressed

## Technical content

- engineered nanoparticles
- hazard characterisation,
- (cyto-)toxicology, main endpoints and health effects
- testing;
- environmental and biological fate,
- transport, and transformation of nanoparticles..

Specific features: Cooperation with the USA.

## Expected impact

- (i) Better *in vitro* & *in vivo* methodologies for the regulatory safety demands
- (ii) better understanding of the impact of the nanoparticles on health and environment
- (iii) future definition of appropriate measures
- (iv) sustainable and responsible development
- (v) support to research and regulation

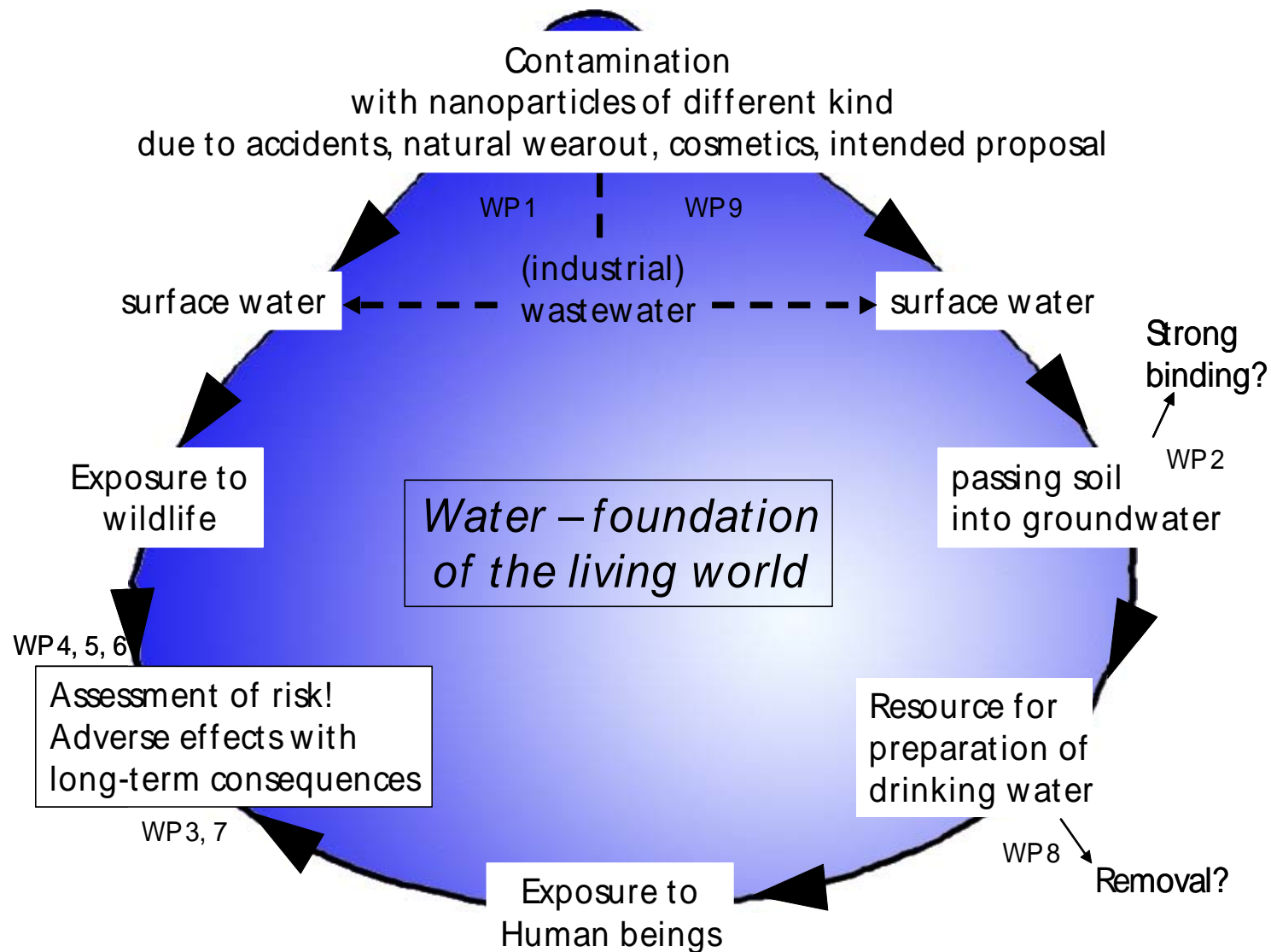
# Potential partners

Country	Participants
G	Fraunhofer Institut IKTS
G	Technische Universität Dresden
G	Umweltforschungszentrum Leipzig-Halle
G	Forschungszentrum Rossendorf
F	Commissariat à l'Energie Atomique
F	Institut National des Sciences Appliquées
NL	University
NL	Institute
PL	University
PL	Institute
FL, F, B	Institute, Industry

# Planned content of the project

- Preparation and characterisation of nanoparticles
- Transport and transformation of nanoparticles in soil and water
- Behaviour of (transformed) nanoparticles in physiological systems
- Uptake and distribution of nanoparticles in cells and organs
- Uptake & Distribution of nanoparticles in whole organisms
- Impact of nanoparticles on gene expression in animal model systems
- Impact of nanoparticles on innate immunity of fish embryos
- Impact of nanoparticles on nervous tissue and bone of vertebrates
- Formation of an European research platform

# Fields of research



# Thank you very much for your attention!

## Contact:

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