

NAN S REG

A common European approach to the regulatory testing of nanomaterials



Mission and approach

The innovative and economic potential of Manufactured Nano Materials (MNMs) is threatened by a limited understanding of the related EHS (Environmental Health and Safety) issues. While toxicity data is continuously becoming available, the relevance to regulators is often unclear or unproven. The shrinking time to market of new MNM drives the need for urgent action by regulators. NANoREG is the first FP7 project to deliver the answers needed by regulators and legislators on EHS by linking them to a scientific evaluation of data and test methods.

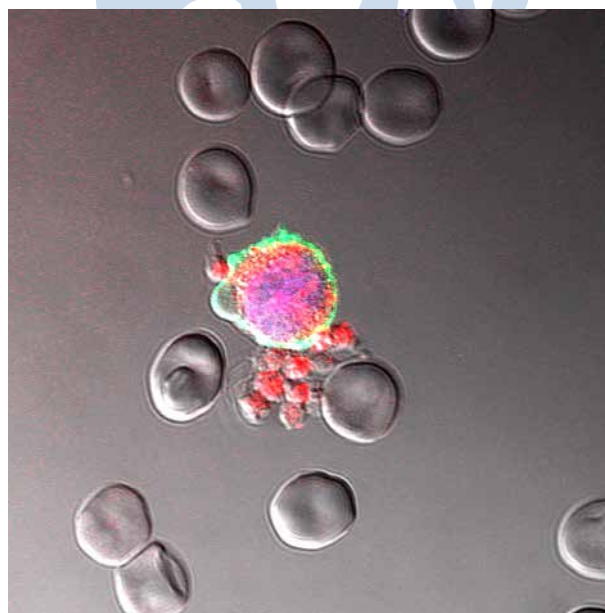
Based on questions and requirements supplied by regulators and legislators, NANoREG will:

- I. provide answers and solutions from existing data, complemented with new knowledge
- II. provide a tool box of relevant instruments for risk assessment, characterisation, toxicity testing and exposure measurements of MNMs
- III. develop, for the long term, new testing strategies adapted to innovation requirements
- IV. establish a close collaboration among authorities, industry and science leading to efficient and practically applicable risk management approaches for MNMs and products containing MNMs.

The interdisciplinary approach involving the three main stakeholders (Regulation, Industry and Science) will significantly contribute to reducing the risks from MNMs in industrial and consumer products.

NANoREG starts by analysing existing knowledge (from WPMN-, FP- and other projects). This is combined with a synthesis of the needs of the authorities and new knowledge covering the identified gaps, used to fill the validated NANoREG tool box and data platform, conform with ECHA's IUCLID DB structure.

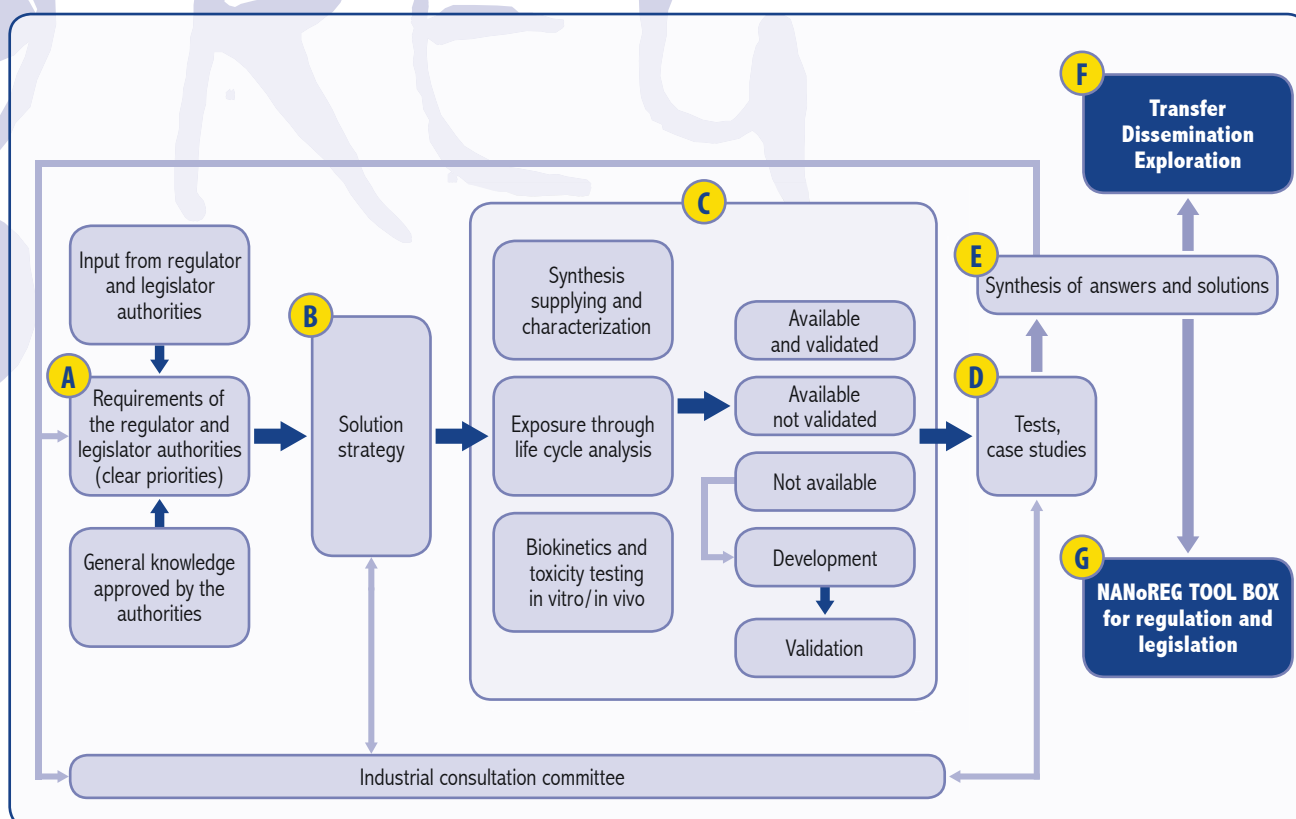
To answer regulatory questions and needs NANoREG will set up the liaisons with the regulation and legislation authorities in the NANoREG partner countries, establish and intensify the liaisons with selected industries and new enterprises, and develop liaisons to global standardisation and regulation institutions in countries like USA, Canada, Australia, Japan, and Russia.



Monocytes identified by CD14 staining (green) are phagocytosing 26 nm carboxyl-polystyrene beads (red). Erythrocytes do not accumulate beads
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NANoREG workflow

- A.** Elaboration of the requirements and questions of the national regulation and legislation authorities, complemented with general knowledge about gaps, such as defined in the RIPoN 2/3 ports or by SG6 of OECD.
- B.** Development of an interdisciplinary solution strategy within WP 1 in order to structure R&D activities preparing the answers and solutions.
- C.** Performing R&D and validation projects in order to elaborate a solid ground for recommendations, answering the questions and needs of decision makers of legislation authorities and industry.
- D.** Independent test and case studies examining the answers and solutions.
- E.** Synthesis of validated information to respond to the questions and requirements for the national regulation and legislation authorities.
- F.** Transferring the knowledge to the national authorities and experts in workshops, dissemination of the not protected findings to all stakeholders, nationally and internationally; monitoring the exploitation of the results by the national regulation and legislation authorities.
- G.** Collecting all tested instruments, recommendations etc. in the “NANoREG INSTRUMENT TOOL BOX” for regulators and legislators.



Project Partners

59 partners from 15 countries
(Austria, Belgium, Denmark, Finland, France, Germany,
Ireland, Italy, Netherlands, Norway, Portugal, Spain,
Sweden, Switzerland, United Kingdom)
participate in the NANoREG project

Project Coordination

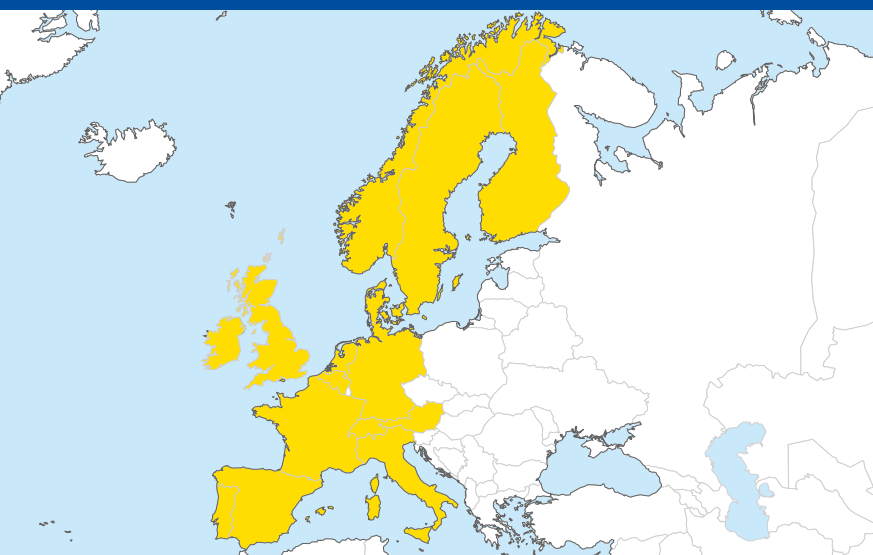
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NANoREG at a Glance

- ▶ **Grant agreement number:** 310584
- ▶ **Project start:** March 1st, 2013
- ▶ **Project duration:** 42 months
- ▶ **Coordination:**
Ministry of Infrastructure and
the Environment, Netherlands
- ▶ The NANoREG project is funded by the
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