

Future-proof Approaches for Risk Governance

Lessons Learned from Nanotechnologies

Summary report of the multistakeholder dialogue at 24-25 January 2023 at OECD in Paris, France

European innovation policies are focused on their supportive role to accelerate the green and digital transition in Europe. Advanced materials like nanomaterials are prioritized as one of the Key Enabling Technologies within these policies. Meanwhile the Commission acknowledges in its 2019 Communication on Better Regulation the need “to have regulation that fosters and, at the same time, harnesses innovation to the benefit of the environment, the economy and EU citizens”. The three H2020-projects Gov4Nano, NANORIGO and RiskGONE (shortened as NMBP-13 projects) have gathered meaningful insights about challenges and issues in risk governance of nanomaterials. We regard these insights relevant for efficient and effective risk governance of advanced (nano)materials.

The NMBP-13 projects have adapted to the societal and innovation changes moving beyond nanomaterials to encompass advanced materials in general. The projects cover the central players, when it comes to developing science-based progress on the safe and sustainable development and implementation of advanced (nano)materials in society in support of the European green deal. The projects have established a broad network, also including Member States, with a focus on inclusiveness and co-creation between public and private actors.

At the final conference, the key results on the following thematic areas were discussed during multistakeholder roundtables:

- 1) Harmonisation & Standardisation, where we need to reduce the pacing problem by fostering early awareness of harmonisation and standardisation needs (Annex 1),
- 2) Risk Governance Portal and Tools, where there is a need for a common platform to find developed and emerging tools that can support a sustainable future (Annex 2),
- 3) Data Management, where data/knowledge sharing, ontologies and platforms need to be in place for future development (Annex 3), and
- 4) Organisation of Risk Governance, where there is a need to choose the organisational form that is appropriate for supporting the implementation of various initiatives for advanced materials and to foster co-creation among stakeholders (Annex 4).

In conclusion, the projects have generated a tremendous knowledge on risk governance and risk assessment of nanomaterials. In short, the key conclusions were:

- PARC and IRIS do not address (advanced) materials – additional interventions are required
- Linking to the AMI2030 initiative is key
- With regards to the four roundtables:
 - I. Harmonisation & Standardisation, (Malta Position Paper: supported by DE, AUS and NL): a European Testing Strategy is needed to be prepared for new/advanced materials, to support the CSS, SSbD and Green Deal and adapt/develop new methods. This requires ongoing financial support. OECD-TGs & international cooperation must be in synergy with OECD (platform)
 - II. Risk Governance Portal and Tools: The joint IT infrastructure (Portal) meets the need for accessibility of data and information.

Points of attention: costs for maintenance and updating must be absorbed by new projects as there is no financial continuity foreseen in the long term

- III. Data Management: The foundation for re-use of data for regulatory purposes has been laid by FAIRification.

Points of attention: stimulating actual data reuse

- IV. Organisation of Risk Governance: For future-proof Risk Governance of Materials, a connecting organisation for the above mentioned topics and their continuity is crucial.

To this end, multi-stakeholder engagement and connection to innovation & safety is key

Several lessons can be learned for risk governance of advanced materials. These observations and lessons are presented in a memorandum (Annex 5), positioned in the broader context of the Innovation Principle and current needs to support sustainable innovations for a sustainable future. It is our opinion that activities and projects addressing risk and sustainability governance can incentivise sustainable innovations, rather than forming a barrier. However, coordination actions and synergies are urgently needed. First the goals and ambitions as laid down in the European Chemicals Strategy for Sustainability (CSS) and the Zero Pollution Action Plan, can become an integral part of various crucial innovation programmes dealing with advanced materials.