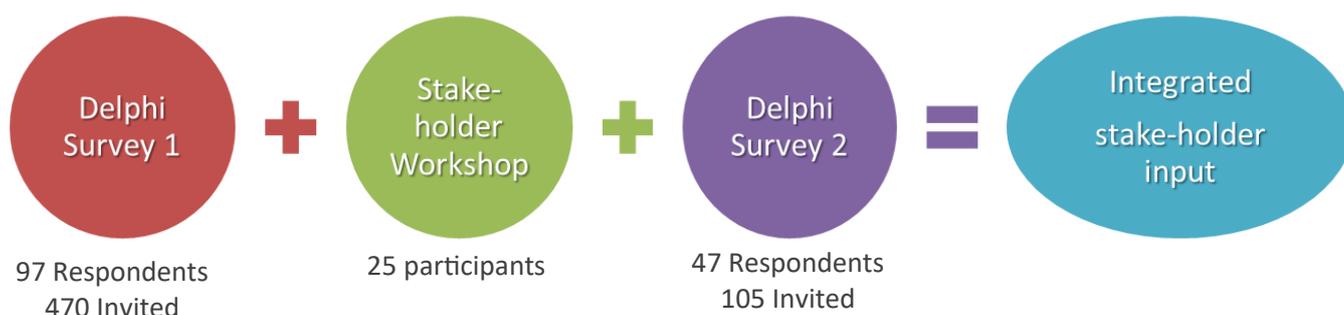


## Stakeholder needs and perspectives for development of a nano-risk governance framework

Establishment of a web-based nano-risk governance portal with well-documented tools and guidance is one of the key products of the caLIBRAte project. It was pivotal for the project to identify the needs, expectations, and priorities for the establishment of a nano-risk governance framework within different stakeholder groups and the barriers for its application to guide our work and meet their needs.

Stakeholders from business, government,

research, insurance and different associations were approached through a two-round Delphi survey. A work-shop was established to explore specific requirements and topics identified. Participating stakeholders were identified as competent in and/or involved in the field of nano-technology and nano-innovation and covered at least 15 declared countries.



### Desired capabilities and functions of a framework

Stakeholders identified several key desired capabilities and functions of the anticipated nano-risk governance framework:

- 1) It should be flexible to allow assessment of different materials, products and scenarios
- 2) It should allow for human and environmental exposure, hazard and risk characterization considering different exposure and release scenarios
- 3) It should allow for comparative or quantitative risk-benefit analysis in comparison with alternative materials that are not nanomaterials
- 4) Tools should be easy to use (simple and clear) and also applicable for risk governance in laboratories conducting research and development

5) It should have built-in databases/libraries and link-out access toxicological data

6) It should enable user access to information on e.g. regulatory requirements, standards (OECD, ISO, CEN) safety guidelines, standard operational procedures for data generation

7) All tools should be documented with information about algorithms in use, plus which parameters influence the results and decisions

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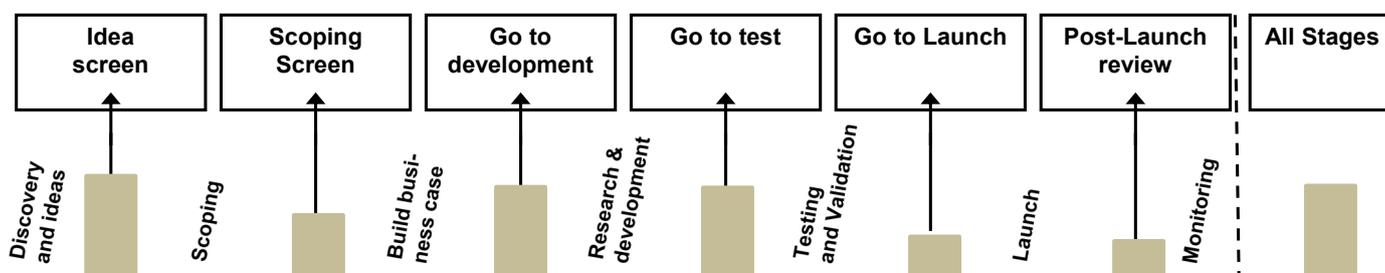
### When should nanospecific risk assessment be applied?

Ninety percent of the stakeholders responded that it is important to very important to establish nano-specific risk assessment procedures to manage the potential risks of nanomaterials for workers, consumers and the environment.

Within the context of the Cooper Stage-gate® Idea to Market model, the idea that risk assessment should be prominent at early stages of innovation is gaining ground amongst the stakeholders addressed. This result indicates a change in risk management behaviour with a

willingness to apply results from safety assessments for decision making earlier, during initial stages of innovation of nanomaterials and nano-enabled products.

Consequently, the tools in the prospective nano-risk governance framework must be able to provide risk assessment information for decision support based on nanomaterial data sets that vary from limited to comprehensive data on hazard, exposure, and environmental release.



Stages in a Cooper Stage-Gate® Idea to Market Model. The bar heights illustrate the number of respondents who indicated that nano-specific risk assessment should be done at the given stage.

### How can nano-risk governance be improved?

The stakeholders identified that nano-risk governance could be improved. The recommendations included:

- 1) Monitoring of risks posed by nanomaterials should be made and periodically amended on the basis of scientific progress.
- 2) Risk communication and guidance on safe use with transparent risk information should be ensured — Business-to-business and business-to-consumer.
- 3) An internet-based nanosafety knowledge platform should be considered.
- 4) User-involvement by stakeholders in the development of nanomaterials and nano-enabled products could increase user acceptance.

This fact sheet is based on caLIBRAte Deliverable 11: Report on stakeholder needs and perspective produced as a result of collaboration between Assozione Italiana par la Ricerca Industrialia (I), Steinbeis Advanced Risk Technologies GmbH (D), National Research Centre for the Working Environment (DK), Dialogik Gemeinnuetzige Gesellschaft für Kommunikations- und Kooperationsforschung GmbH (D), and Research Triangle Institute (USA)

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Contact us to learn more about  
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