# Appendix I

#### A detailed list of identified challenges

* The exponential growth of amount ENM in the market all over the world.
* Safety knowledge gap related to exposure still present.
* Lack of resources makes the regulatory approaches challenging.
* Reliable prediction of hazards and risks from physicochemical data.
* Lack of material and toxicity data.
* Many databases are not available for public use.
* The conventional risk assessment methodology is not adequate for newly developed materials in the market.
* Risk analysis is still technically and methodologically limited.
* Risk acceptance is strongly dependent on the understanding of the risk.
* Exposure scenarios need to be developed specifically case by case (for each production type)
* Which ENMs should be considered when labelling consumer products?

#### A detailed list of identified gaps

* Accessible databases and libraries incomplete. Difficult access to data for the manufacturers
* Exposure data and models from stakeholders incomplete
* Consensus on the hazard metric
* Exposure scenarios incomplete
* ENMs grouping unavailable. Grouping nanomaterials is an important means that may enable faster ENM risk assessment
* Risk management during the process of innovation of new products and new technologies.
* Calibration of exposure tools for ENMs.
* Professional nano-safety training unavailable