

The responsible use of nanomaterials: The position of the German Social Accident Insurance

Nanotechnologies have the potential to be positive long-term economic developments, and to safeguard existing workplaces and create new ones. Their use will influence the technological performance of Germany as a production location and the country's future standing in international competition. The exceptionally wide scope of application of these innovative cross-sectoral technologies has ramifications for virtually all areas of life.

Accordingly, the German government has launched its "Nano-Initiative - Action Plan 2010" with the involvement of seven government ministries, thereby setting the political course for effective and sustainable exploitation of nanotechnologies. In its "nano dialogue", the German Nano Commission has set itself the task of supporting the dramatic pace of development of nanomaterials by assuring the opportunities whilst at the same time discussing the safety issues. Nanomaterials or products containing them may possess new and unique properties. The scale on which human beings and the environment are exposed to such properties, and whether this may have negative consequences, is the subject of intensive research. At present, OSH legislation contains no special provisions governing nanoparticulate substances. Amendments to the statutory framework are being discussed at European and national level. In order to ensure that health and the environment are already protected appropriately at this stage, the Nano Commission recommends comprehensive application of the European Commission's precautionary principle in order for potential risks to be reduced to a minimum. On this basis, it has drawn up preliminary criteria for provisional risk assessment and has formulated five basic principles for the responsible handling of nanomaterials. These recommendations are intended in the first instance for enterprises, and are based upon their own responsibility and a voluntary commitment to implement them.

In recognition of its mandate to promote workplace safety and health, the German Social Accident Insurance favours responsible action during the safe handling of nanomaterials at

the workplace. For this purpose, we support the political initiative of the Nano Commission and offer our member companies, education establishments and insured employees a strategic partnership in the practical implementation of these recommendations. In the process, our experience gained over decades in the health and safety of workers at work constitutes capital that is of value in coping with these new challenges.

In consideration of the position on prevention adopted by the autonomous administration of the German statutory accident insurance institutions on 1 December 2008, the following areas of activity are defined:

- In order to eliminate the gaps in knowledge of possible hazards presented by nanotechnologies and to further the ongoing development of our prevention services, we conduct research of our own and fund research by third parties. The focus of this research lies upon safety (measurement and test procedures, risk analysis and protective measures).
- Through targeted training measures, we promote the ability of our staff to provide advice and surveillance in the area of nanotechnologies. We integrate the topic into the curricula of further education and advanced training. In our function as Germany's largest non-governmental provider of education services, we provide advisory and information services for specific target groups.
- We assist the companies in finding information on the use and handling of nanomaterials and on performing and documenting risk assessments. We exploit our direct access to the companies in order to provide assistance on the ground. We attach particular importance to the sectors using the technology and to small and medium-sized enterprises. We compile information for specific target groups and in accordance with our QA procedures, and publish it on the Internet and in the form of practical guides.
- We identify examples of good practice in the handling of nanomaterials, and make them known to the companies. We recommend suitable measures for the minimization of risks during the creation of such workplaces. As a result, we contribute not only to the retention of good health, but also to the process of value creation within companies.

 We monitor processes at national, European and international level during the development of standards, the identification of potential risks, and efforts to regulate nanomaterials. We are active on government committees, within the scientific community and in standardization, and take part in public dialogue and debates on nanotechnologies.

Owing to the swift pace of development of nanotechnologies and of the underlying conditions, it is essential that these positions and their implementation be subjected periodically to critical review in order for the need for any adjustment to be identified.

Passed by the Governing Committee and the 1/10 Members' Meeting of the DGUV in Aachen on 27/28 May 2010.