

# Focus on IFA's work

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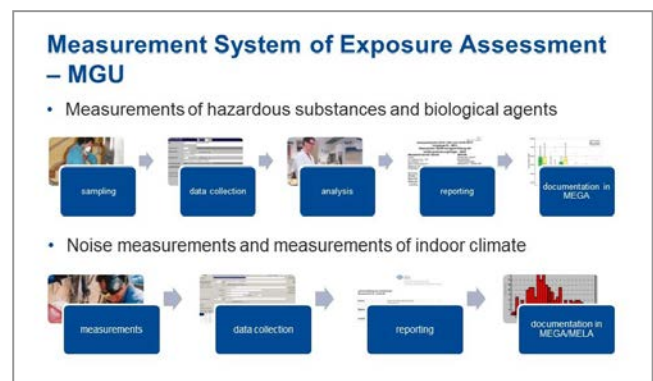
## Measurement system for exposure assessment (MGU)

### Problem

Activities involving hazardous substances, biological agents, noise exposure and indoor climate are encountered to varying degrees at many workplaces in virtually all sectors. A range of actions by the legislator, the German Social Accident Insurance Institutions, and also manufacturers and users, are aimed at substituting hazardous substances with less hazardous alternatives, organizing safer working practices, and taking effective prevention measures against hazardous substances, biological substances and noise.

Indoor atmospheres also have a major influence upon the performance, well-being and health of human beings. Efforts are therefore also being made in this area for example to combat draughts and unpleasant indoor climates.

The German Social Accident Insurers support employers in fulfilling their duty to protect employees against hazardous substances, biological agents, noise exposure and indoor climate. They are also obliged to act as an inspectorate. In this capacity, they measure the presence and concentration of hazardous substances under Part VII (19) 1,5 of the German Social Code, in order to identify and assess hazards and to propose or order measures where applicable.



Standardized processes in the MGU

### Activities

In the early 1970s, the system to determine data on workplace exposure to hazardous substances was developed in conjunction with the German Social Accident Insurance Institutions. This co-operation was later made subject to a binding code of procedure within the MGU system of exposure assessment (formerly the BGMG) of the German Social Accident Insurance Institutions.

In 1999, all parties involved implemented a uniform quality management system. Performance of the procedure, definition of responsibilities, and the measures for continual improvement are set out in detail.

Measurements of hazardous substances, biological agents, noise and climate are now conducted jointly by the IFA, the measurement services of the Social Accident Insurance Institutions and the umbrella association of the agricultural social insurers. Approximately 23,000 measurements are conducted every year in over 3,500 companies within the MGU. These produce over 131,000 measured values for hazardous chemical substances and biological agents. Noise measurements are conducted annually at around 25,000 measurement points in approximately 1,100 companies. In 2016, approx. 30 climate measurements with over 1,300 measured values were carried out as well.

### Results and Application

The company and exposure data recorded by the MGU are used by the German Social Accident Insurers primarily for the generation of measurement reports, on the basis of which an assessment is made, the workplaces concerned evaluated and, where applicable, measures are proposed.

The data are however available to the German Social Accident Insurers for general prevention purposes, epidemiological research, and studies related to reported cases of formally recognized occupational diseases attributable by hazardous substances or noise. For this purpose, all recorded data are documented in the MEGA and MELA exposure databases.

### Area of Application

All sectors of industry; 90% of activities relate to SMEs

### Additional Information

- [MGU](#) – Das Messsystem  
Gefährdungsermittlung der UV-Träger 7. Aufl.  
Hrsg.: Deutsche Gesetzliche  
Unfallversicherung (DGUV), Berlin 2013 (in  
German)
- IFA's exposure database MEGA. Focus on  
IFA's work, No. [0207](#)
- OMEGA hazardous substance software. Focus  
on IFA's work, No. [0231](#)
- MELA – Messdaten zur Exposition gegenüber  
Lärm am Arbeitsplatz. Aus der Arbeit des IFA,  
Nr. [0287](#) (in German)

### Expert Assistance

IFA, Division 1: Information technology – Risk  
management

### Literature Requests

IFA, Central Division