

# Methodological approach of the DGUV risk observatory

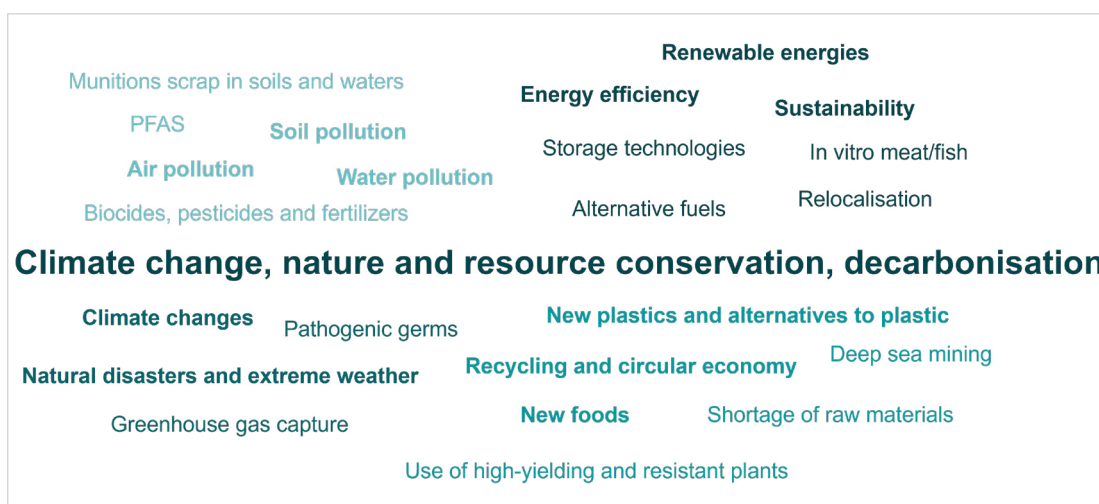
## Aim of the risk observatory

The risk observatory aims at recording at an early stage changes that will influence the world of work, universities, schools, and child daycare centres. What developments will change the world of work and education how and to what extent for insured persons in the next five to ten years? What do these innovations mean for the prevention of accidents at work, occupational diseases and work-related health hazards? Where are special prevention efforts required and what can they look like in concrete terms?

The risk observatory supports the accident insurance institutions in proactive prevention by identifying top developments, i.e. developments that will have a major impact on the safety and health of insured persons, across all sectors and in relation to specific sectors.

## Collection of trends as a basis

The starting point of the risk observatory in each survey round are global trends and developments associated with them. The developments are specific manifestations of a global trend (cf. **Figure 1**). Therefore, each survey round of the risk observatory is preceded by the establishment of an inventory of current trends and developments from various sources (print and online).



**Figure 1:** Word cloud global trend "climate change, nature and resource conservation, decarbonisation" with developments

In the third survey round, the collection of trends is continued for the entire survey round for the first time.

Examples of trend sources are websites and journals of scientific societies and research centres (e.g., Fraunhofer, Helmholtz, Max Planck, European Organisation for Nuclear Research), of future institutes, of the European Commission, of federal ministries, reinsurers and national associations (e.g., Confederation of German Employers' Associations, German Trade Union Confederation). Trends can also originate from DGUV committees, bodies of the accident insurance institutions and the press or can be reports from the DGUV trend search.

The pool of developments of the third survey round starting in 2023 comprises 117 developments that are assigned to the following ten global trends:

- Digitalisation and connectivity
- New technologies
- Globalisation
- Economy
- New Work
- Climate change, nature and resource conservation, decarbonisation
- Infrastructure
- Mobility
- Demographic change and diversity
- Social affairs and health.

## Surveys to identify top developments

The risk observatory relies on two independent surveys to identify top developments:

- **Sector relevance survey**

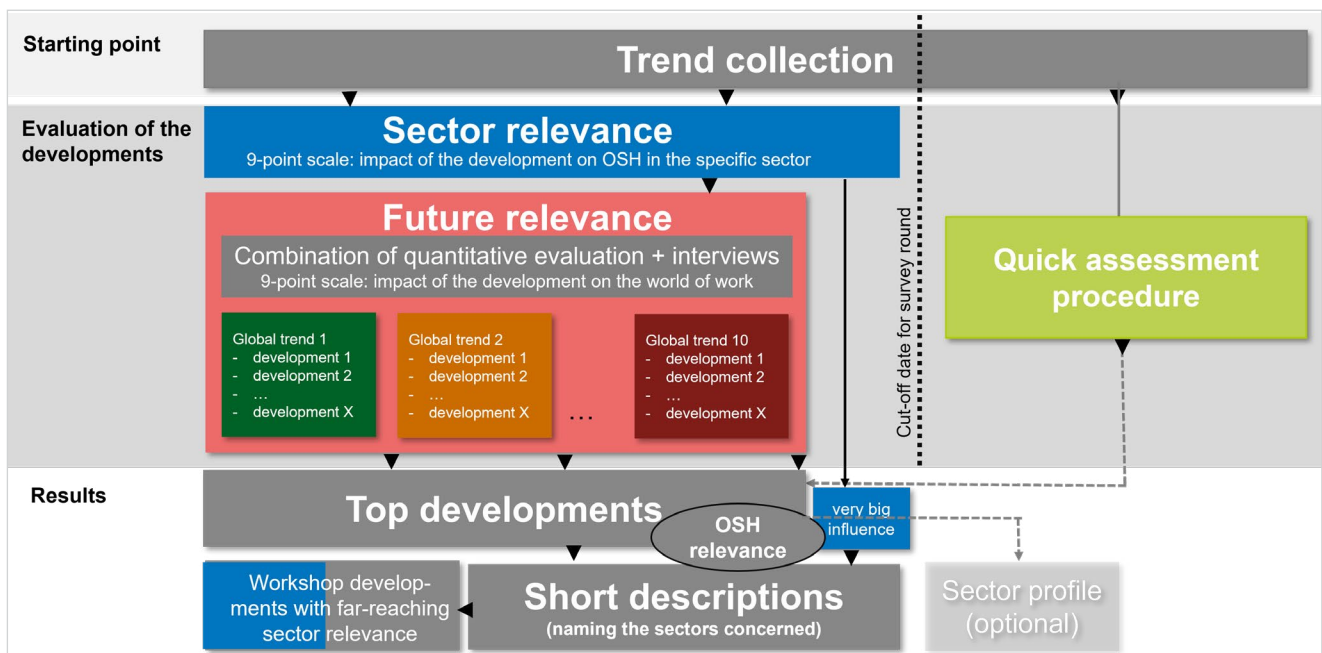
Sector experts from the statutory accident insurance institutions assess the whole number of developments from the inventory. The assessment is done with regard to a development's influence on the safety and health of insured persons in their respective sectors. The assessments of the sector experts are averaged for each development. A development whose influence in the next five to ten years is estimated to be very large is included in the pool of top developments. The number of sectors in which this development has a major influence is taken into account.

- **Future relevance survey**

Experts from scientific institutions and societies, as well as from OSH institutes within and outside the statutory accident insurance institutions, evaluate developments from their field of expertise. If, for example, the expert has expertise on a development that is assigned to the global trend "digitalisation and connectivity", all developments in this global trend are submitted to him or her for evaluation. There is always the possibility to make no statement. The experts' assessments are averaged per development. All experts estimate the influence of the respective development on the world of work in the next five to ten years. Experts from the field of occupational safety and health also assess the influence on the safety and health of the insured. There is a future relevance survey for each global trend, thus ten parallel future relevance surveys in the third survey round.

## Assessment procedure after conducting the surveys

The future relevance survey is to be conducted every three years. In the meantime, however, the collection of trends will continue and newly found developments will have to be assessed so that they can be included among the top developments if their influence is rated as significant. At regular intervals, the DGUV expert committee "New forms of work" evaluates these newly found developments with its trend search group. **Figure 2** illustrates the procedure in the risk observatory.



**Figure 2:** Methodological procedure in the 3rd survey round of the risk observatory

## Results of the risk observatory

### Continuously updated trend collection

The trend collection is continued and updated quarterly and published on the internet:

[https://dguv.de/medien/ifa/de/fac/arbeiten\\_4\\_0/trendsammlung\\_risikoobservatorium\\_runde\\_3.pdf](https://dguv.de/medien/ifa/de/fac/arbeiten_4_0/trendsammlung_risikoobservatorium_runde_3.pdf)

### List of prioritised developments

The evaluation of the developments in the two surveys and the evaluation procedure between the survey cycles results in a ranking of the developments per global trend. From these rankings, cross-sectoral and sector-specific top developments can be identified.

### Descriptions of the TOP developments

For each top development, a brief description is prepared that introduces the development, describes its impact on the safety and health at work and identifies the affected sectors. These descriptions are published immediately after completion. The preparation of the descriptions is accompanied by research and in-depth interviews with experts.

**Report**

At the end of the three-year cycle, an overall report is produced in which the descriptions of the top developments are summarised and published.

**Sector profiles (optional on request)**

So-called sector profiles summarise all the top developments affecting a sector and describe them in the context of the sector, taking into account their interactions. Sector profiles can be produced at the request of the accident insurance institutions.

**Further processing of top developments**

The top developments are submitted to the statutory accident insurance institutions' prevention managers. In their conference, they can decide to initiate further work on individual top developments, e.g., in DGUV departments or expert committees or in the form of an exchange, e.g., in a workshop.

**Timeline**

The risk observatory has been in existence since 2011 and followed a five-year cycle in the first two survey rounds: the first survey round took place from 2012 to 2016; the second from 2017 to 2021.

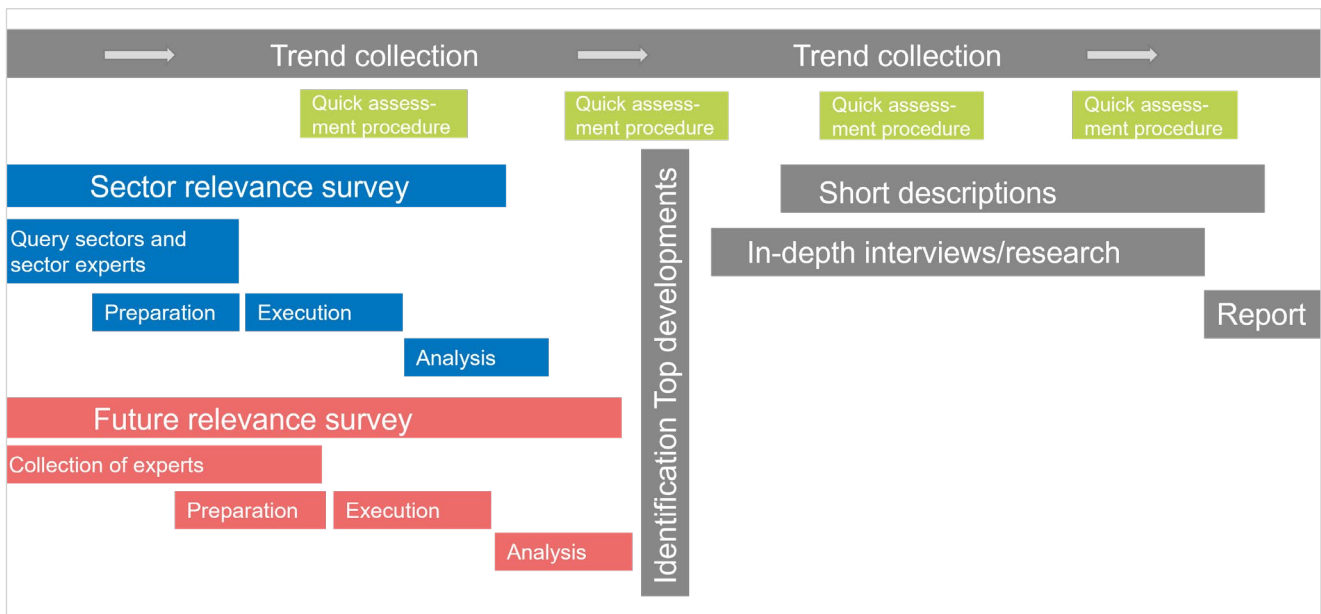


Figure 3: Three-year cycle of the risk observatory

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