

## THE PREVENTION PROCESS MANAGEMENT SYSTEM (PPMS) IN GERMANY: SUPPORTING OCCUPATIONAL SAFETY AND HEALTH COMPLIANCE (CASE DE2)

### Introduction

Promotion of effective occupational safety and health (OSH) practices is a key element of safer and healthier workplaces. Improving arrangements and practices for managing OSH across a whole range of industry sectors and firm sizes — large, medium and small — is stimulated, supported and sustained by a range of institutional actors and processes both internal and external to firms. Scientific research highlights, among others, the critical role that state regulators for OSH, such as labour inspectorates but also prevention services, can play (EU-OSHA 2021). This case study is part of a research project<sup>1</sup> conducted in Germany to provide further insight into this topic.

The Prevention Process Management System (PPMS) is a digital software programme developed by the German Social Accident Insurance Institution for the foodstuffs and catering industry (BGN)<sup>2</sup> in collaboration with Oracle Germany. This software is based on an Oracle database and is aimed at labour inspectors of the BGN.

The software facilitates the work of inspectors in various ways. For example, it enables mobile working via notebooks, smartphones and tablets using a web function. In this way, operational information can be accessed and updated from anywhere and at any time. The PPMS also offers functions such as 'geocoding', in which data is linked to locations, which makes it easier to select the companies to be inspected based on various criteria (more about this in section 0). Overall, the PPMS improves the efficiency of monitoring activities by facilitating access to up-to-date information and supports the planning of company visits.

### Description of the case

The UVTs are the German social accident insurers for the private sector (*Berufsgenossenschaften*, BGs), and the Public Sector Accident Insurers (*Unfallkassen*, UK) or Municipal Accident Insurance Associations (*Gemeindeunfallversicherungsverbände*, GUV) deal with the public sector.

Every company in Germany is a mandatory member of such a UVT, that is, depending on the industry, and has statutory accident insurance in a BG or UK/GUV.

The German Social Code VII (SGB VII) determines the legal obligations of the UVT (Bundestag der Bundesrepublik Deutschland 07.08.1996):

- to prevent of occupational accidents, occupational diseases and work-related health hazards in companies;
- to restore health and performance by all appropriate means after the occurrence of an occupational accident or disease; and
- to compensate insured persons or their survivors by means of cash benefits.

To this end, they must monitor the implementation of the measures and advise employers and insured persons in accordance with § 17 of the Social Code VII (SGB VII).

<sup>1</sup> The full report is available at: <https://osha.europa.eu/en/publications/germanys-approach-supporting-occupational-safety-and-health-compliance-role-labour-inspectorate-and-prevention-services>

<sup>2</sup> See: <https://www.bgn.de/>

In this setting, the BGN developed the information, planning and documentation system PPMS based on an Oracle database.

The PPMS helps in the monitoring activities of the BGN because it not only provides the labour inspectors (UVT) with information about the company, it is also suitable as a system for recording data and photos at the same time. In general, this enables monitoring of prevention activities, which in turn has a positive effect on compliance behaviour within the companies (Epple and Kutschbach 2021).

## Aims

The PPMS is a result of the comprehensive digitalisation process of the UVTs. The digitalisation of essential fields of activity of the BGN is not only intended to trigger a reduction in bureaucracy but also to find an appropriate response to climate change through reduced paper consumption. In addition, the digitalisation process is seen as an opportunity to achieve an economic upturn (Keller et al. 2022).

Furthermore, with the PPMS the goal of a digital knowledge management system is being pursued and largely achieved. A digital knowledge management system and thus the need for specific data on member companies and other service providers will ultimately become increasingly important with the expansion of the monitoring activity to include the 'pilot function' (Keller et al. 2022).

The object of the concept of the 'pilot function' is an extension of the role of labour inspectors (UVT). In the course of monitoring and advising on safety and health, the labour inspectors are the main contact persons on prevention issues and can act as an interface to external social service providers such as statutory health and pension insurance, the Federal Employment Agency, and the integration and inclusion offices.

## Target group

The PPMS was developed primarily for the monitoring and advisory activities of the labour inspectors of the BGN. The above-mentioned goals of digitalisation, increased efficiency, reduced bureaucracy, sustainability and improved knowledge management modernise the monitoring and consulting activity of the labour inspectors (UVT) at different levels (more about this in section 0).

## What was done, and how?

The PPMS is a digital tool based on an Oracle database and was developed by the BGN in cooperation with Oracle Germany. The PPMS is also highly accepted by the labour inspectors of the BGN because the practical experience and needs of the labour inspectors of the BGN themselves were incorporated into its development.

The development of such a digital assistance system requires a specialised IT department/agency. For implementation in the practical activity of inspectorate action, training and qualification modules are necessary to familiarise the labour inspectors with the new system.

The PPMS is already being heavily used, and yet the development process is not yet completed. The PPMS is continuously being adapted. For example, the BGN is now moving to a sovereign cloud with the PPMS. In cooperation with the Federal Office for Social Security (BAS), data protection issues are being clarified for this.

## Degree of innovation

The PPMS is a highly innovative BGN working tool. It responds to the German government's coalition agreement by driving digitalisation and features many sustainable aspects. Not only can paper consumption be reduced by digitalising the data material, the special feature of 'geocoding' (see section 0) also curbs unnecessary trips to the companies (Epple and Kutschbach 2021).

## Approach

The PPMS helps the general prevention work of the BGN. In addition to consulting, however, inspection is particularly affected. Apart from comprehensive basic data on all operating sites, the PPMS contains additional information on the occurrence of accidents and occupational diseases, documentation on company inspections, measurement reports, participation in the bonus (incentive scheme) programme, training measures and much more. At the same time, the PPMS supports the 'pilot function' of the

labour inspectors, because it makes it much easier to communicate with the competent authorities (see section 0) (Epple and Kutschbach 2021).

The PPMS could also be used for data exchange between the federal state OSH authorities and the UVTs. Finally, as the federal state OSH authorities and UVTs both fulfil an inspection function in the dual OSH system in Germany, the PPMS also has sufficient potential to promote the exchange of data between the two sides.

This objective of the Joint German Occupational Safety and Health Strategy (GDA)<sup>3</sup> is laid down by law in the OSH Inspection Act (ArbSchKG). This is intended to facilitate the mutual exchange of information on company inspections between the federal state OSH authorities and the UVTs. The specific density of information that must be mutually exchanged is therefore also laid down by law.

GDA-related data could be entered, processed and merged in just a few steps. The electronic transmission of this data to the federal state OSH authorities, as required by the OSH Inspection Act since 2023, could also be carried out using the PPMS.

## What was achieved?

The PPMS improves and simplifies monitoring activities in many respects. For one, the web function — which can be accessed via VPN — enables more mobility in working via notebook, smartphone or tablet. This means operational information can be retrieved and supplemented regardless of time and place. At the same time, the web function ensures that current data can be retrieved, and company visits can be rescheduled spontaneously in the event of obstacles — for example, if a company is closed.

The PPMS also has other functions that, among other things, make it easier to select the companies to be visited. These include, for example, the special feature of 'geocoding'. All data in the PPMS are linked to locations, so that the labour inspectors can not only display their own area of responsibility but also use automatically generated filters, such as the calculated risk index, to efficiently select companies based on key figures.

## Success factors and challenges

The success of the PPMS is reflected in the satisfaction of the labour inspectors. Beta versions were initially created for inspectors to submit feedback on, allowing the field service applications to experience a high level of acceptance. Not only does the system provide effective and targeted tools to make inspectors' jobs easier, it also excites inspectors with its newfound flexibility and spontaneity. If a new company has to be found spontaneously during a field operation, this can now be done easily (Keller et al. 2022).

## Transferability to other EU Member States

Digital assistance systems for the work of labour inspectorates can also be used in other European countries and are already being used there.

## Further information

Berufsgenossenschaft Nahrungsmittel und Gastgewerbe  
Körperschaft des öffentlichen Rechts  
Dynamostraße 7-11  
68165 Mannheim  
Tel.: +49 06214456-0  
Email: [info@bgn.de](mailto:info@bgn.de)

<sup>3</sup> See: <https://www.gda-portal.de/EN/>

## References

- Bundestag der Bundesrepublik Deutschland (07.08.1996): Siebtes Buch Sozialgesetzbuch - Gesetzliche Unfallversicherung - (Artikel 1 des Gesetzes vom 7. August 1996, BGBl. S. 1254). SGB 7, vom 20.12.2022. <https://www.gesetze-im-internet.de>, zuletzt geprüft am 25.01.2023.
- Epple, Annegret; Kutschbach, Susan (2021): Betriebsbesichtigung 4.0 - digitale Assistenten. In: DGUV Forum (12), 18-24.
- EU-OSHA – European Agency for Safety and Health at Work, *Improving compliance with occupational safety and health regulations: an overarching review*, 2021. Available at: <https://osha.europa.eu/en/publications/improving-occupational-safety-and-health-changing-world-work-what-works-and-how>
- Keller, Andreas; Mays, Frank; Scharmentke, Dietmar; Nöthen-Garunja, Isabel; Portuné, Roland; Schmid, Heinz (2022): Einsatz digitaler Werkzeuge in der Prävention - die Zukunft hat bereits begonnen! In: DGUV Forum (03), 3-8.

---

Authors: Lars Fritzsche and Clarissa Eickholt.

Project management: Lorenzo Munar and Dietmar Elsler - European Agency for Safety and Health at Work (EU-OSHA).

This case study was commissioned by the European Agency for Safety and Health at Work (EU-OSHA). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect the views of EU-OSHA.

Neither the European Agency for Safety and Health at Work nor any person acting on behalf of the Agency is responsible for the use that might be made of the above information.

© European Agency for Safety and Health at Work, 2024

Reproduction is authorised provided the source is acknowledged.

For any use or reproduction of photos or other material that is not under the copyright of the European Agency for Safety and Health at Work, permission must be sought directly from the copyright holders.