



Ergonomics

The DIN Ergonomics standards committee: 50 years on
EU-OSHA Healthy Workplaces Campaign

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KAN – Kommission Arbeitsschutz und Normung



Kai Schweppe
Chairman of KAN

Baden-Württemberg industry
and employers' association (UBW)

Proven content, new layout

Have you noticed? The KANBrief has a completely new look. A change was on the cards, and here it is: the KANBrief begins the new year with a fresh new layout. As before, you can expect news on KAN's activities and a wide range of topics relating to occupational safety and health and standardization in Germany and Europe.

One perennial topic is that of ergonomics. The fact that a workplace of suitable dimensions is important for health is becoming apparent to many employees currently working remotely. Over the past 50 years, the DIN Ergonomics standards committee has compiled the findings of ergonomics research in standards. One challenge lies in preparing this knowledge in a form sufficiently practical to enable other standards committees to adopt it easily. Only then can product standards be created that designers can apply effectively during the creation of ergonomic products.

Continued research is needed to ensure that anthropometric data in standards actually reflect the body measurements of the current population. It is therefore particularly important that greater support once again be provided to German universities in addressing this topic. «

The DIN Ergonomics standards committee: 50 years on

Action by companies is particularly conducive to success when consideration is given to human factors. Standards governing ergonomics contain a wealth of guidance for companies. For 50 years, such standards have communicated fundamental principles of ergonomics, presented important concepts in the sphere of human factors, and created a recognized body of rules for the design of work and products.

The standardization of ergonomics, which forges an important link between research and industry, also addresses future issues of work design, and seeks solutions for present and future challenges, such as criteria and definitions for dealing with work-related mental stress, design for an ageing workforce, and management of the digital transformation and artificial intelligence.

The labour and social policy motivating establishment of the Ergonomics standards committee

The Ergonomics standards committee was founded in the German Standardisation Committee (DNA, now DIN) in 1970, at the instigation of the GfA (Gesellschaft für Arbeitswissenschaft e.V.) and other interested parties¹. The German Federal Ministry of Labour and Social Affairs supported its creation, in the same way that its current counterpart continues to support standardization in ergonomics.

The objective of the new Ergonomics standards committee was for its eleven working committees to set out, in standards, validated research findings concerning the humane design of work (as governed in Germany by Section 91 of the BetrVG, the Industrial Relations Act), in accordance with the state of the art in science and technology². Knowledge which previously had had to be painstakingly gleaned from various publications by individual experts was now discussed by a committee of experts who compiled it by consensus in standards. These standards thus form a central, reliable basis for activities at company level and for specific product standards.

One of the decisive factors behind the committee's creation were the provisions in Sections 90/91 of the BetrVG concerning employees' rights to consultation and co-determination in the shaping of the workplace, work processes and the working environment. In this context, ergonomics standards were regarded as suitable instruments for defining and updating the acknowledged state of the art in science and technology in the relevant areas, and thereby serving as a basis for solutions where these were to be negotiated between the social partners. Since its inception, the committee has included delegates not only from among academics and practitioners in the field, but also from employers' associations and trade unions.

The role of standardization in the present and future world of work

Models and concepts in the sphere of human factors must be continually adjusted or redeveloped in consideration of changing underlying conditions³. The findings of human factors research are still defined and described to a large extent in national and international ergonomics standards, the objective being for the products and work of our modern world to be designed such that they are humane, and the efficiency of work to be improved. The DIN Ergonomics standards committee (DIN NAErg) addresses principles of human factors in system design, particularly the ergonomic design of work tasks and processes, equipment and machinery,

Ergonomic principles

- ▶ Humane design of work processes

Human physiological and mental characteristics

- ▶ Anthropometrics
- ▶ Biomechanics (e.g. exertion of force and load handling)
- ▶ Mental stress

Accessibility

- ▶ Accessible design
- ▶ Consideration of the needs of older persons and persons with reduced abilities

Physical environment

- ▶ Ergonomics of the physical environment (noise, lighting, climate)
- ▶ Temperature of touchable surfaces

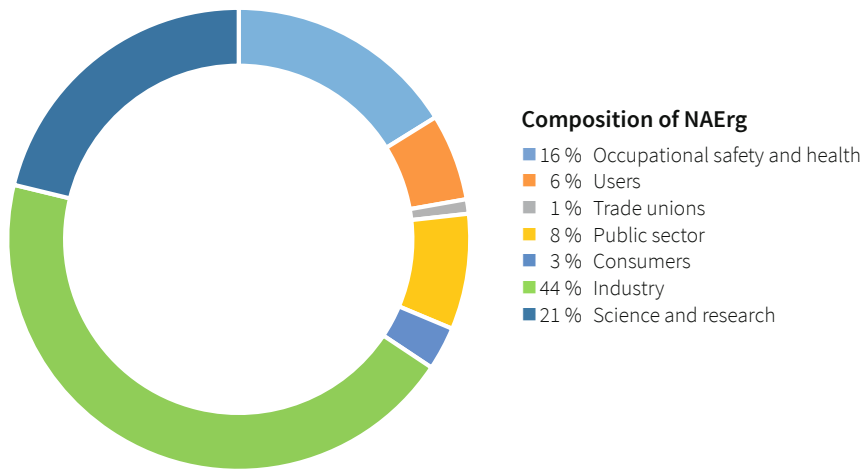
Information processing systems

- ▶ Human-machine interfaces
- ▶ Interactive systems
- ▶ Software ergonomics
- ▶ Displays

Industry 4.0

- ▶ Design of work and products in Industry 4.0

Figure 1: Subject areas covered by the Ergonomics standards committee



working environments and personal protective equipment. Networking with product standards committees is to be expanded further so that, for example, findings relating to human physical strength, body dimensions, postures and loads can be incorporated accordingly.

The focus of current standardization activity in the field of ergonomics lies on human characteristics relevant to work. These particularly include constraints of physical and mental capacity and, as targets, the safety, health and well-being of the persons concerned. The aim of ergonomics standardization is to optimize the performance, effectiveness and efficiency, accessibility and usability of the design solutions for work systems (workplace, work process, suitable associated work equipment and the working environment). Figure 1 shows the subject areas in which the experts of the individual DIN NAERG committees are currently active.

The shaping of new worlds of work is an area of growing importance. The NAERG's committees develop ergonomics standards that address these challenges to businesses in a practical way. Essential fields are:

- Networked and intelligent digitalization, for example in "Industry 4.0" or artificial intelligence, which opens up numerous ways of redesigning work and thus also potential for ergonomics and occupational safety. Assistance systems such as smart glasses, tablets or smart watches, forms of engineered assistance (human-robot collaboration, etc.) and increased automation will shape the work of the future.
- Demographic change places the focus on safeguarding the physical and mental capacity of young and old (attracting a new generation of workers and assuring the continued fitness for work of an ageing workforce). For example, exoskeletons are currently being piloted as a means of reducing the effort of physical labour. The Exoskeletons committee recently set up within DIN NAERG supports efforts being made in companies.
- These developments require production, office and other work systems to be designed for accessibility and an ageing workforce. Accessible products open up opportunities for social participation and an improved quality of life to greater numbers of people. Ergonomics standards can be used to develop high-quality products and innovative solutions for all users, regardless of their age or constraints upon their fitness.

Further information is available on DIN's website at www.din.de/en/getting-involved/standards-committees/naerg and in the DIN NAERG image brochure⁴.

More information on ergonomics is available in episode 6 of the KAN Podcast, in which you can listen to NAERG Chairperson Professor Sascha Stowasser discussing the background to ergonomics standardization and the challenges it currently faces.

www.kan.de/podcast
(in German)



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¹ DIN: Nationale Ergonomie-Normung. In: DIN-Mitteilungen, 54(1975)7, pp. 319-322

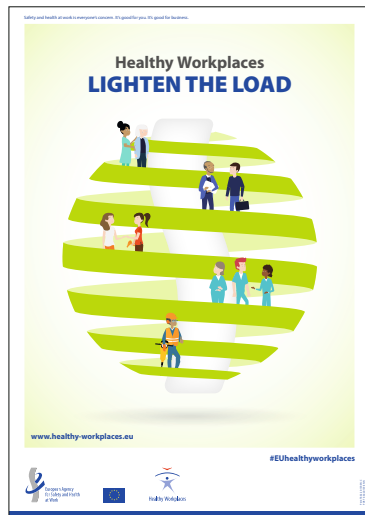
² Potthoff, E.: Betriebliches Personalwesen. Berlin, New York: Walter de Gruyter, 1974.

³ Stowasser, S.; Friedrich, N.: Perspektiven der Ergonomie-Normung. In: Zeitschrift für Arbeitswissenschaft, 68(2014)4, pp. 237-240.

⁴ www.din.de/resource/blob/237700/dd230b387675e5556f0bac1b65f26a63/imagebroschuere-naerg-data.pdf (in German)

Healthy workplaces – lighten the load

The EU-OSHA Healthy Workplaces Campaign 2020-2022



A good approach to safety and health at work is good for everyone: workers, companies and society as a whole. Such an approach requires a good culture of prevention. Specifically, employers and management personnel must commit to preventing health risks and actively promoting good employee health.

Ideally, an active, participative approach to occupational safety and health would make all companies more competitive – for example by reducing the number of working days lost due to illness, increasing productivity and making work more sustainable.

The 2020-2022 campaign by the European Agency for Safety and Health at Work (EU OSHA), with the slogan “Healthy workplaces – lighten the load”, aims to raise awareness for

work-related musculoskeletal disorders (MSDs) and the importance of preventing them. The goal is to encourage employers, employees and other stakeholders to work together in preventing MSDs.

The campaign also aims to demonstrate that work-related MSDs affect all economic sectors and activities and that they can be tackled and prevented. This is to be attained through the following strategic objectives:

1. Raising of awareness for the prevention of work-related MSDs by the provision of **data, facts and figures** on their impact
2. Supporting risk assessment and active implementation of measures for preventing MSDs by the provision of **tools, guidance** and audiovisual materials
3. Demonstrating the relevance of MSDs for everyone – irrespective of the type of work they perform, and in what sector – and how MSDs can successfully be reduced, for example by the provision of **examples of good-practice solutions**
4. **Improving knowledge** concerning emerging and growing hazards associated with work-related MSDs
5. Highlighting the importance of **reintegrating** workers with chronic MSDs into the workforce and assuring their continued employment, and identifying means for achieving this

6. Promoting **better cooperation** between different players through the exchange of information and good-practice solutions

In order to provide practical support to employers, EU-OSHA maintains a database of resources and case studies on MSDs. It is setting the course for the future by producing a campaign pack for schools containing a wealth of useful resources, in collaboration with the European Network Educational Training in Occupational Safety and Health (ENETOSH) and the education sector.

EU-OSHA will work closely with this network and its partners to promote the exchange of experience and good practice concerning MSDs and to ensure that the campaign messages reach employees and employers, particularly in small and microenterprises. It will also organise relevant activities and events throughout the campaign, such as the Good Practice Competition of the Healthy Workplaces Campaign.

The campaign will culminate in the Healthy Workplaces Summit, to be held in November 2022. This represents an opportunity for all those involved in the campaign to honour successes and evaluate the lessons learned.

EU-OSHA
Campaign and press team
partners@healthy-workplaces.eu

Campaign competition

Is your organization already making innovative contributions to safety and health at work? If so, enter the competition for good practice for preventing musculoskeletal disorders.

All contributions will first be evaluated by the EU-OSHA national focal points. The shortlisted examples will then be entered in the pan-European competition.

For more detailed information, please visit <https://healthy-workplaces.eu/de/get-involved/good-practice-awards> or contact your national focal point (<https://osha.europa.eu/de/about-eu-osha/national-focal-points/focal-points-index>).

Is product safety compatible with complex, artificial intelligence?

Where the behaviour of systems cannot be predicted, defining requirements for them presents legislators with a challenge

No universally accepted definition of artificial intelligence exists. It is clear however that the various methods of artificial intelligence are intended to support human beings in reaching decisions – or even to take these decisions out of their hands. An as-yet unresolved issue is in what cases, and subject to what criteria, it is permissible for decisions with a bearing upon safety to be taken automatically by methods of artificial intelligence, or under their influence.

The risks presented by a product must be assessed and reduced to an acceptable level before the product is made available on the market. The directives and regulations of the European Single Market specify the high level of protection to be observed. Where products and work equipment lie outside this harmonized scope, they are subject to national regulations.

Under the hierarchy of protective measures, a product should be designed such that hazards cannot even arise in the first instance. Where this is not feasible, protective equipment must reduce the risks until only acceptable residual risks remain. Finally, users must be informed of these residual risks. Where control systems are used to execute the safety functions of a product, they play a significant role in this concept.

It is crucially important that manufacturers are able to assess the risks presented by their products. This is precisely where the problem would lie if, for example, the intention were to rely on a control system supported by machine learning¹ to prevent people from being endangered by moving parts of a machine: the designers



of systems based on the more complex methods of artificial intelligence (such as machine learning with neural networks) have as yet been unable to explain satisfactorily, even after the event, why their systems behaved in a certain way.

Safety technology in unknown territory

More complex methods of artificial intelligence now enable systems to take decisions automatically. These may include decisions that have a bearing upon safety. The technical principles and assumptions upon which conventional safety technology is based were not designed for application in such cases, however. For this reason, research is currently being conducted into evaluation methods. The results are intended to be prepared as soon as possible for consideration in standardization activity². The goal is to determine how artificial intelligence may be used, if at all, in the context of safety-related systems.

One strategy that can be used to demonstrate reliably the safety of highly complex systems involves the definition of “arguments” that use inductive reasoning to obtain strong circumstantial evidence (but not absolute proof). This strategy has long been used for very complex technologies, for example in nuclear technology or aeronautics and aerospace, and also to determine whether software is suitable for safety-related use.

Attempts are now being made to use such approaches, which tend to have their origins in the field of risk management, to create catalogues of criteria for an acceptable level of risk that can also be applied to methods of artificial intelligence. These criteria may concern specification and modelling, explainability and accountability of decisions, transferability to different situations, verification and validation of the system, monitoring during runtime, human-machine interaction, process assurance and certification, and also safety-related ethics and data security. The European Parliament’s call for an EU regulation on ethical principles for the development, deployment and use of artificial intelligence, robotics and related technologies is similar in its purpose; here, the Parliament is proposing such criteria for assessing conformity.

Under an approach of this kind, safety is defined primarily not by verifiable product properties, but by verifiable process criteria. However, in order to attain a level of safety approximating that embodied in the European product safety legislation and the basic principle of prevention at the workplace, the criteria for the aforementioned “arguments” would first have to be shown to be complete and reliable. Strictly speaking therefore, even regulations governing the framework and basic requirements for this purpose cannot be set out until the assumptions on which they are based have been reliably proven.

Initial regulatory approaches

ISO/TR 22100-5³, recently published, attempts to set out the limits within which machine learning could be embedded in a machine control system in accordance with legislation and standardization in their current form. The European Commission is currently presenting proposals for revision of the Machinery Directive 2006/42/EC and for a regulation governing artificial intelligence, both of which contain legally binding framework conditions for the use of artificial intelligence.

These framework conditions must contain complete, clear and verifiable requirements setting out in what cases and subject to what criteria safety-related decisions taken by a system may be influenced or automated by methods of artificial intelligence. Whether this situation has been reached must now be determined by the experts.

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¹ In machine learning, computers learn a task from data rather than by being explicitly programmed to perform it or being trained by rules that are comprehensible to human beings.

² For example the ISO/TR 5469 project, “Artificial intelligence – Functional safety and AI systems”, in ISO/IEC JTC 1/SC 42/WG 3

³ ISO/TR 22100-5:2021-01, Safety of machinery – Relationship with ISO 12100 – Part 5: Implications of artificial intelligence machine learning

Hand-arm vibration exposure caused by isolated shocks

The occupational safety and health community aims for a standardized measurement procedure

Stud guns, nail drivers and captive bolt devices are items of work equipment sharing a common characteristic: their use gives rise to isolated shocks that also act upon the user and may pose a hazard. Assessment and reduction of the hazard requires a standardized measurement procedure.

Isolated shocks are difficult to measure

Repeated isolated (discrete) shocks are regarded as a special form of hand-arm vibration. No consensus exists on the criteria for differentiating between isolated shocks and the typical hand-arm vibrations occurring for example on pneumatic drills. Measurement of repeated isolated shocks presents major challenges, and as yet, no recognized measurement method exists for determining exposure. Little is also known of the health effects of long-term exposure to isolated shocks. By contrast, circulatory disorders and harm to the joints in the hand-arm system caused by typical hand-arm vibration are formally recognized in Germany as occupational diseases.

The Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA) has been addressing the topic of isolated shocks for many years, and is also involved in relevant standardization activity. Since no consensus existed at European level on measurement methods for isolated shocks, the IFA requested KAN's support in order firstly to explore the possibility of a standard at national (i.e. German) level.

On 20 October 2020, the KAN Secretariat hosted a virtual KAN expert discussion on the subject of hand-arm vibration exposure caused by isolated shocks. Experts in vibration from a number of stakeholders in Germany took part in this discussion. The stakeholders included the research sector, accident insurance institutions, employees, manufacturers, testing laboratories, the German regional authorities and the standardization sector. The experts first shared their

information, on the basis of which they were able to discuss further steps.

More research and coordination required

The papers and discussions showed that a considerable need for research still exists into the hazards presented by isolated shocks, for example into their physiological mechanisms of action and diagnosis of their effects. In order to coordinate further research projects and disseminate information specifically to occupational physicians and to experts in other medical disciplines, the participating research institutes will network more closely with each other and with other experts in vibration in Germany.

The experts consider the establishment of guidance values and the evaluation of measurement results to be topics relevant to occupational safety and health. Further research results are needed to address these issues. To this end, the DGUV is currently funding a project for research into isolated shocks to the hand-arm system caused by machines and tools¹, which the IFA is conducting jointly with the Institute for Occupational Medicine, Prevention and Health Management of the University of Lübeck and the RISE Research Institute of Sweden. The project is intended to deliver

information on the health effects of isolated shocks.

Application for a standard planned

Parallel to the research activity, a measurement standard is to be developed concerning the determining of exposure to isolated shocks. The relevant terminology is also to be standardized. The participants in the expert discussion indicated their desire for the KAN Secretariat to submit an application for a national standard. KAN will discuss this item at its next meeting in spring 2021.

A comparable measurement method and the availability of guidance values would enable adequate consideration to be given in risk assessments to repeated isolated shocks and enable preventive measures to be determined. In the long term, this should provide users with better protection against potential hazards.

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¹ www.dguv.de/ifa/forschung/projektverzeichnis/ff-fp0415.jsp



The state of the art for hazardous substances at the workplace

The best, or the usual?

The standard of protective measures that must be taken at the workplace during activities involving hazardous substances must correspond to the state of the art. According to the definitions of the German Ordinance on hazardous substances (GefStoffV¹), the state of the art is the state of development of advanced processes, equipment or methods of operation that justify the assumption that a measure is suitable in practice for protecting worker safety and health. Recommended course of action for determining the state of the art can be found in the Technical Rules for Hazardous Substances (TRGS) 460².

The GefStoffV requires the employer to prevent employees from being exposed to risks caused by hazardous substances. Should this not be possible, employees' exposure to these substances must be reduced to a minimum in accordance with the state of the art. The second strategy for protection specified in the GefStoffV is based on compliance with occupational exposure limits.

Compliance with the TRGS technical rules gives rise to a presumption of conformity with the GefStoffV. At the same time, as stated in the foreword of each TRGS, these technical rules are intended as a description of the state of the art. The state of the art is however the result of a development implemented in practice by companies that are ahead of the curve. This development is not always reflected immediately in the regulations.

This **dynamic progression** of the state of the art often gives rise in practice to a legal problem, namely that many of the affected companies are able to observe the state of the art only at considerable expense, if at all. Moreover, technical rules of this kind do not exist for each and every subject.

Customary modes of operation and procedures

As a result of this situation, in circumstances where assessment criteria³ cannot (yet) be observed, a further level of requirements has emerged in practice for protective measures to be taken in respect of hazardous substances: the customary modes of operation and procedures, which are described in the TRGS 460 technical rules. These rules constitute proven combinations of individual measures that are used in the sector concerned but do not necessarily represent the state of the art.

In contrast to the state of the art, which reflects the progress made by advanced companies, the TRGS 460 technical rules are based on the standard that **many companies** reach when applying the legislation. The rules do not however take account of companies exhibiting deficits in this respect. Examples of the customary modes of operation and procedures can be found in the TRGS 559 technical rules



concerning dust containing quartz and the TRGS 504 technical rules (now withdrawn) concerning activities involving exposure to respirable and inhalable dust.

Example: removal of baseplates from railway sleepers

The removal of baseplates (metal plates upon which the rails rest) from railway sleepers is a clear example of the gap between the state of the art and customary procedures in industry⁴. The customary procedure in the industry is for **baseplates to be removed from the sleepers manually** in the open air or in partially enclosed areas, either on the ground or at forklift height. Following an intervention by the labour inspectorates in Germany prompted by violation of the occupational exposure limits for polycyclic aromatic hydrocarbons (PAHs), a **procedure employing telescopic arms** was developed which can be controlled remotely from a cabin equipped with air conditioning and safety ventilation. This procedure now constitutes the state of the art.

A solution in which **baseplates are removed automatically** by a machine has not yet been implemented in practice. It follows that such a procedure cannot yet be termed the state of the art, although it would certainly be the procedure giving rise to the lowest exposure.

European aspects

The European OSH Framework Directive⁵ and the German Occupational Health and Safety Act (ArbSchG) both require consideration to be given to the state of the art in the measures determined by the risk assessment. In contrast to the GefStoffV, the EU directives specifically governing hazardous substances do not address the state of the art.

Conclusion

To resolve the problems associated with its implementation in practice, the state of the art must be interpreted with respect to practical applicability. The state of the art need not necessarily constitute an optimum solution; at the same time however, it should not be substituted by “customary practice” in industry. The resulting standard generally lies above that normal in industry. Several possible solutions for better implementation in practice are conceivable:

As in EU regulations, the employer could be obliged to **take account** of the state of the art when determining measures as part of the risk assessment.

During the design of new installations, the employer could be obliged to implement the state of the art. Grandfathering or a dedicated state of the art for legacy plants and retrofits to them may be necessary in order to prevent a continual requirement for technical adaptation. Other adjustments may continue to be necessary, such as organizational changes and **proportionate** structural or technical changes.

Ultimately, it would be necessary to determine whether the state of the art is to be required as “the sole best solution” for implementation, or whether it also requires **more extensive practical validation**.

Until a target standard exists, for example in the form of TRGS technical rules, i.e. assessment criteria, occupational safety and health in practice will continue to face the challenge of defining, in each individual case, the standard of protective measures actually required.

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¹ www.baua.de/EN/Topics/Work-design/Hazardous-substances/Working-with-hazardous-substances/pdf/Hazardous-Substances-Ordinance.pdf

² www.baua.de/EN/Service/Legislative-texts-and-technical-rules/Rules/TRGS/pdf/TRGS-460.pdf

³ Concentrations specified in TRGS technical rules for triggering measures or limiting the exposure (e.g. state of the art), TRGS 402, (16) 2

⁴ M. Hagmann et al., 2017. Exposure to PAH during recycling of railway sleepers and thermal remediation of contaminated soil, www.baua.de/EN/Service/Publications/Essays/article1682.html

⁵ <https://eur-lex.europa.eu/eli/dir/1989/391/oj?locale=en>

An appeal from the skilled crafts sector to the standardization community

Transparent, practical, with greater participation

Germany has around a million skilled craft businesses in over 130 different trades. Their value chains cover numerous products with technology ranging from the simple to the highly complex, and the associated services. In each of these, the state of the art is described in standards. These standards must be of high quality, and in particular must be geared to the specific needs of the crafts sector¹.

Forward-thinking standardization: what's important?

In the view of the German Confederation of Skilled Crafts (ZDH), it is crucial that standardization activity be made more transparent at all levels and that more opportunities for participation in this activity be created. The European Commission must shape its procedures for the preparation of standardization mandates or delegated acts concerning standardization in such a way that small and medium-sized enterprises (SMEs) are also able to participate on an adequate scale.

Delegates from the crafts sector are often significantly under-represented on national, European and international standards committees. The ZDH is therefore calling on the German Government and the European Commission to ensure and support the effective participation of SMEs in standardization activity, as is set out in the Regulation on European Standardization (EU) 1025/2012². At European level, these businesses are already represented by Small Business Standards (SBS). This approach is important, but should be expanded sustainably in view of the great number of current and anticipated standardization projects. The last thing that is needed at this time are funding cuts.

The standardization work itself should also be organized in a way that takes greater account of the situation of SMEs. Since SMEs and their delegates cannot regularly leave their workplaces, greater use must be made of the available digital channels of communication, even once the Corona pandemic is over, in order to permit remote participation in standardization activity.

Standards in practice in the skilled crafts sector

Over the years, subject-specific standards have become increasingly complex. The standard governing façades, for example, has grown from 40 to 170 pages in the space of ten years. The number of European and international standards has also been growing steadily, as has the number of generic standards, particularly in recent years. The latter govern aspects such as machine safety, product safety, ergonomics or accessibility, but not with respect to a specific product. This makes them much more difficult for the skilled crafts sector to identify and implement than product standards. What is needed here is for an efficient standards monitoring system to be created which would provide SMEs with a swift overview of the standards and standardization projects relevant to them.

Standards must be based on generally acknowledged good practice. Far too often however, the progress of research is taken as the benchmark. This leads to standards becoming increasingly difficult to apply in practice. Information that in the past could be read off in tables must now often be determined by the standards users themselves using multifactorial reference methods and calculations. This is difficult to implement in a skilled crafts environment.

Furthermore, product standards are increasingly being duplicated, particularly by European service standards. Two standards may then have to be considered and applied. In many cases, these service standards are in conflict with the experience and knowledge acquired by a master craftsman in Germany during their training. This duplication must be avoided at all costs in the future.

The performance of certain procedures should not be tied to particular qualifications laid down in standards, as has been attempted in renovation, for example. The ZDH also considers procedural standards for the awarding of contracts to be superfluous, since this area is clearly regulated in Germany.

Standards and the standardization process must be transparent, comprehensible, easily accessible and practical. As part of our standardization strategy, we are lobbying for these principles once again to be firmly established.

Holger Schwannecke

Secretary-General of the German Confederation of Skilled Crafts (ZDH)

¹ ZDH position paper (in German) www.zdh.de/presse/pressemitteilungen/zdh-praesidium-beschliesst-branchenuebergreifende-normungsstrategie-handwerk/?L=0

² <http://data.europa.eu/eli/reg/2012/1025/oj>



KAN opens European representation

The best place for an entity to present its own interests is where foundations are being laid, for example in regulation. In the case of Europe, this is Brussels. Following this unwritten rule, KAN opened its European representation on 1 December 2020.

The European representation will be set up and managed by Angelika Wessels. Ms Wessels is a lawyer specializing in European law and has over 13 years' professional experience in Brussels. She began her career at the EU office of the German Confederation of Skilled Crafts (ZdH). From there she moved to the European Parliament, where for over 10 years she supported the work of two MEPs in her function as office manager and parliamentary assistant.

The tasks of KAN's European representation will be to represent KAN's interests vis-à-vis the EU institutions, to develop and maintain working contacts at European level, to hold events and to conduct joint projects. At the same time, the European Representation will support KAN's technical work by providing contacts and knowledge of processes.

New publication concerning treatment tables

In December 2020, the supreme regional authorities in Germany responsible for medical devices and the German Federal Institute for Drugs and Medical Devices (BfArM) published a new document containing information on the safety of treatment tables and corresponding requirements. One of the requirements upon manufacturers that is addressed in the document is that they observe the updated BfArM recommendation for treatment tables with power adjustment to be designed such that the tables are not able to trap persons and thereby cause serious injury. A guide for operators is also included, providing information on the purchase, operation and use of treatment tables with electrical height adjustment.

The reason for production of the new document is the risk of persons being trapped beneath a treatment table with electrical height adjustment, resulting in injury and possibly even death (see also KANBrief 4/20).

The document is available for download (in German), for example on the website of the Münster district government:

www.bezreg-muenster.de/zentralablage/dokumente/gesundheit_und_soziales/medizinprodukte/Therapieliegen-Information-der-OLB-und-des-BfArM_Beschlussfassung_AGMP.pdf

New Exoskeletons standards committee

On 11 January 2021, DIN created Joint Working Committee NA 023-00-08 GA, Exoskeletons. This joint working committee is managed by the Ergonomics standards committee and is tasked with examining the need for standardization in the field

of exoskeletons at national, European and international level, and with launching relevant projects, preferably directly at European or international level. The committee's purpose therefore includes initiating creation of relevant European and international committees and monitoring standardization activity in other countries.

The scope of the committee's work includes terminology, technical characteristics, ergonomic and safety requirements, efficacy, side-effects and information for use. The committee's role does not cover the standardization of specific types of exoskeleton: these lie within the remit of other standards committees (for example concerning robotics or orthopaedic technology). Active dialogue with other standards committees is however expressly desired in the interests of coordinating activities.

DIN SPEC 91020 withdrawn

DIN SPEC 91020, governing occupational health management, was withdrawn on 1 October 2020. Its withdrawal had already been announced in 2019 and, now that the objections received have been addressed, has been confirmed and completed by the Advisory Committee of the Standards Committee for Organizational Processes (NAOrg). Besides poor market penetration, the reason for its withdrawal is the publication in 2018 of ISO 45001, Occupational health and safety management systems – Requirements with guidance for use. This development rendered a separate DIN SPEC for the organization of occupational health management in companies and other organizations superfluous.

Existing certificates based on DIN SPEC 91020 will remain valid until they expire; no new certificates may be issued. NAOrg recommends that ISO 45001 now be used instead of the DIN SPEC. The deadline for replacing certificates issued under the DIN SPEC's predecessor document, BSI OHSAS 18001, is also the end of September 2021.

Publications

Research paper: "Arbeitsforschung 2021+" (labour research, 2021 and beyond)

What research issues concern employers, and what will the world of work look like in the future? The Confederation of German Employers' Associations (BDA) discusses the need for research into the world of work in the years ahead, from the perspective of employers and the situation on the ground. The aim is to stimulate discussion of labour policy and to motivate the research community to give greater consideration in the future to questions raised by companies.

<https://arbeitgeber.de/wp-content/uploads/2021/02/bda-arbeitgeber-forschungspapier-arbeitsforschung-2021.pdf>

Events



24.-25.03.2021 » Online

Plattform Arbeitsschutz

Arbeitsschutz Aktuell: Digital Pop-Up

Hinte Expo & Conference

www.arbeitsschutz-aktuell.de/de/news/digital-pop-up

21.04.2021 » Essen

Seminar

**Weiterbildung für Sicherheitsbeauftragte
und Fachkräfte für Arbeitssicherheit**

Haus der Technik

www.hdt.de/seminare-workshops Weiterbildung

12.-14.05.2021 » Lloret de Mar (Spain)

Conference

The Vision Zero Safety Future Summit

ETALON Association

www.visionzerosummit.com

09.-10.06.2021 » Hamburg

Tagung

Arbeitsschutz-Fachtagung

TÜV NORD Akademie

www.tuev-nord.de/de/weiterbildung

Arbeitsschutz-Fachtagung

15.06.2021 » Essen

Tagung

Arbeitsschutztagung

Haus der Technik

www.hdt.de/arbeitsschutztagung-h020011286

22.06.2021 » Online

Journée technique

Robots collaboratifs –

Démarche de prévention pour une intégration réussie

INRS

www.inrs-robotcollaboratifs2021.fr

22.-23.06.2021 » Bochum

Seminar

**Künstliche Intelligenz (KI) in der Arbeitswelt
gestalten und mitbestimmen**

Arbeit und Leben DGB/VHS NRW e.V.

www.aulnrw.de Künstliche Intelligenz

29.-30.06.2021 » Dresden

Fachveranstaltung

Fokus Gefahrstoffe 2021

BG RCI/IFA

www.dguv.de/ifa/veranstaltungen/fokus-gefahrstoffe-2021

30.06-02.07.2021 » Dresden

Seminar

Maschinensicherheit und Produkthaftung

Institut für Arbeit und Gesundheit der DGUV

<https://app.ehrportal.eu/dguv/> 700012

12.-14.07.2021 » London (GB)

Trade fair

Safety & Health Expo

HSE / nebos / ROSPA / Informa Markets

www.safety-health-expo.co.uk

24.-29.07.2021 » Online

International Conference HCII 2021

23rd International Conference on

Human-Computer Interaction

HCI International

www.2021.hci.international

01.-03.09.21 » Dresden

Seminar

Normungsarbeit im Arbeitsschutz

weiterdenken – Aufbauseminar

IAG/KAN

<https://app.ehrportal.eu/dguv/> 700139

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