

Digital challenges & occupational health and safety in Europe opportunities



First report of the conference

What are the challenges and the opportunities of digital transformation economy for health and safety at work in Europe? The question was at the heart of the EUROGIP Discussions on Thursday 15 March 2018 (Paris).

The major round tables addressed this issue from different aspects: the influence of ICT on work organisation, the impact of digital economy on insurance and prevention of occupational injuries with a focus on online platforms workers, the opportunities offered by digital technology to prevent occupational risks, European social dialogue, and the European Commission's point of view.

Most of the exchanges are summarized here, pending the publication of the Proceedings, more exhaustive, in June 2018.

The EUROGIP Discussions were moderated by the journalist Régis de Closets.

Opening of the Conference

- **Raphaël HAEFLINGER**, Director, EUROGIP
- **Christian EXPERT**, Vice-President of the Board, EUROGIP

Raphaël Haeflinger gives a reminder of the now daily presence of digital technology in both our personal life and our work. We can thus obtain access instantly to a huge mass of information. We also send a lot of personal data concerning ourselves.

Apart from the privacy issues involved, all this information is also an opportunity to develop new services, improve knowledge of risks and put in place personalized early warning systems.

Being able to be reached or located at any time "inevitably influences the content of work, the workload and the perception of work," Christian Expert stresses, for his part. The removal of the boundaries between private life and working life could be harmful for health by increasing the workload. Conversely, teleworking can be beneficial due to

increased rest and the fact that there is no "commuting" risk. However, the nature of the risks changes: VDU work and disturbance of concentration by the continual influx of e-mails.

Finally, digital platforms have created new jobs on the boundary between salaried work and self-employed work.

Right to disconnect or obligation of disconnecting? What gains for occupational risk prevention? What compensation in the context of new forms of work in the event of an accident? All these reasons led Eurogip to organize its annual Discussions to exchange ideas on the digital transformation and its consequences for occupational safety and health in Europe.

The impact of ICT on work organization and environments

- **Liliana GORLA**, Human Resources Director, Siemens France SAS
- **Stephen KINGHORN-PERRY**, Head of Foresight Centre, Health and Safety Executive (HSE), UK
- **Susanne ROSCHER**, Head of the the Occupational Psychology Department, German Insurance Institution for the Administrative Sector (VBG) and of the "New forms of work" Unit, German Social Accident Insurance (DGUV)
- **Antonio TERRACINA**, "Tariff and risk" manager of the Technical Advisory Board for Occupational Health and Safety (CONTARP), Italian Workers' compensation Authority (INAIL)
- **Thierry VENIN**, Director of the Pyrénées-Atlantiques Digital Agency, Author of a thesis on the link between ICT and psychosocial risks as well as a book "Un monde meilleur ? Survivre dans la société numérique", Associate Doctor at the University of Pau (France)

In the past few years, through his observations as a researcher in enterprises, Thierry Venin has noted that the electronic assistants "supposed to help us, in fact generate a cognitive overload." With the CFE-CGC trade union, which has conducted a regular survey on managers' stress, he went to gather their statements. The "cult of speed", greater work intensity and "infobesity" are the everyday lot of managers, who complain that they are too frequently interrupted: once every six minutes! We are witnessing a veritable "electronic ping-pong". Another phenomenon observed is the encroachment of working life on private life, and the transfer of work requiring concentration to private time. Despite all this, the technologies are viewed as "intrinsically positive", which makes it difficult to speak of one's problems. For his part, Stephen Kinghorn-Perry reports the findings of a forward-looking study conducted by the HSE in the UK in 2016, in which both the risks and opportunities due to the spread of ICT are discussed. Smart devices (watches, glasses, telephones, etc.) will expand increasingly, and soon clothing and healthcare devices will measure stress, the pulse, temperature, quality of sleep, etc. With the new risks this entails, notably the risk of miniaturization, because "it will even be possible to implant them in the skin." The spread of these devices could be not only a source of psychosocial risks, because man has endeavoured to adapt to them, but also of physical risks in the event of

loss of control of a robot's force, for example. Not to mention the fact that cobots do not need to take a break. Another danger is the tendency to place excessive confidence in these invasive devices, even in critical situations.

How can enterprises facilitate this change? Liliana Gorla recounts the introduction of smart working and the smart office at Siemens as of 2014. An agreement was reached on teleworking (optional, one day a week) to facilitate the employees' transfer to a new head office. The entities adopted completely open spaces, including for management, with no personalized allocation of offices. Liliana Gorla admits that such radical changes require "significant communication work and a change of corporate culture."

Furthermore, at Siemens the right to disconnect was set out formally in an agreement with the employee representatives last February. The approach adopted is focused on the rules for use of email, in addition to the social networks, with an assertion of the principle that there is no obligation to reply to emails outside of the usual working hours.

According to Thierry Venin, a huge amount of work still has to be done to raise awareness in enterprises, where the right to disconnect is still not very well established. He recommends the adoption of personalized solutions, for each enterprise, and even for each work station.

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While the enterprise has a key role to play, the public regulator has too. Moreover, there have been an increasing number of legislative measures to define a framework for this so-called agile work, or smart work. This was the case recently in France, where the right to disconnect was introduced by the "Loi Travail". This has also been the case in Italy, where a law on smart working was enacted almost one year ago. Although the right to disconnect is asserted, as well as rules relating to working hours and conditions of coverage in the event of a commuting accident, "in reality, everything is not so clear," says Antonio Terracina. In Germany, Susanne Roscher mentions a report on "Work 4.0" produced in 2016. "We must look at occupational risk prevention in a new light," she says. Strict rules should be invented to establish a framework for these new forms of work, and above all these solutions should be worked out much faster for a timely dissemination of these technologies in

enterprises. She mentions a research programme with employers on the possibility for employees of being contacted outside of working hours, in order to establish a framework for this "contactability". During the question-and-answer session, the subject of employee and employer training to cope with these radical changes is discussed. Should highly differentiated programmes be devoted to them? Under Italian law, employers must provide specific training for mobile employees, and Antonio Terracina considers that special training should be worked out for employers so that they may understand how to provide people working at a distance with the right tools. The participants agree on the importance of the subject, in order to assist all generations. One point deserves attention: objective-based work must not result in working time getting out of control.

Online platforms economy and occupational safety and health

- **Jérôme PIMOT**, Cofounder of the "Collectif des Livreurs Autonomes de Paris" (CLAP)
- **Bert SCHOUWENBURG**, International Officer, GMB, Britain's General Union
- **Katalin SAS**, Project Manager, Prevention and Research Unit, European Agency for Safety and Health at Work (EU-OSHA)

Jérôme Pimot recounts his experience as a courier for several platforms, most recently Deliveroo. He points out the limits to the couriers' independence: time slots imposed by the platforms, uniform, but... no law covering an occupational injury.

Pay per delivery remains an obstacle to occupational safety and health, because it provides every incentive to do the most possible deliveries. Moreover, young deliverymen are often not very sensitive to risks and their rights.

Regarding relations between the CLAP organization and French trade unions, Jérôme Pimot says that he was well received and supported financially by the CGT, but the specific nature of platform operations remains complicated for trade unions to understand. In France, the "Loi Travail" obliges platforms to take out accident insurance as of €5,100 in revenues, and some of them have even subscribed as of the first euro. And yet, it turned out that a case of injury sustained by a Deliveroo courier was not covered by the insurance policy taken out with Axa.

In the United Kingdom, Bert Schouwenburg explains how his trade union managed to have Uber drivers reclassified as salaried employees. GMB put forward a whole series of arguments demonstrating the drivers' submission to Uber's instructions: control of the work content and the time when work is performed, and reciprocity of obligations (providing work and accepting deliveries). "It was realised that Uber's workers were in reality not independent." This is a first, even though the US giant has appealed against this ruling, citing the fact that the drivers do not have

employment contracts and that the principle of substitution of drivers means they cannot be considered as employees. The company also highlights the fact that, when there is no passenger in the vehicle, this time cannot be considered as working time.

According to a study by EU-OSHA on the platform economy, the independent worker status varies greatly from one European country to another. However, the coordinator of this work, Katalin Sas, emphasizes the urgency of taking action, because there are higher risks of injury in these types of jobs. Moreover, since the workers tend to be younger than in other job categories, they are less aware of risk prevention and more attracted by the spirit of competition.

From the regulatory viewpoint, three types of strategy have been identified. First, apply the existing legislation to the new forms of work, with one major difficulty: the platforms refuse to be considered as employers. Second, create a specific status for these workers, with the risk that it will be perverted by the platforms. Lastly, protect platform workers whatever their status, which is the most progressive approach, with all the problems encountered, for example in France.

According to Katalin Sas, the EU could define a joint framework based on the European Pillar of Social Rights. Just recently, the European Commission enacted a draft recommendation to open up social welfare for persons working for the platforms, whether freelance or self-employed workers.

What impact of the digital economy on prevention and insurance of occupational injuries?

- **Joachim BREUER**, Director General of the German Social Accident Insurance (DGUV), President of the International Social Security Association (ISSA)
- **Marine JEANTET**, Director, Occupational risks Department, Caisse nationale de l'assurance maladie (CNAM)

For the two speakers at the third round table discussions, it is essential to realize that the change in the working world is a reality that has to be reckoned with.

According to Joachim Breuer, there is currently no matrix to precisely assess what is happening, how many people work for these platforms, but one thing is certain: their number is significantly underestimated. If 10% to 15% of wealth is produced by platforms and does not contribute to social security systems, this is already a huge amount, and in a very short time it would be tragic for the existing systems. "We must therefore find a way to integrate these new forms of work into our social security systems."

Marine Jeantet stresses the fact that these developments will lead the public insurance organizations to be far more agile and reconsider their operating values. She also warns about the "generational shock", convinced that it is essential to find solutions radically different from those of the past. If the definition of work is broadened and it is considered as a productive process irrespective of the location of the activity, then the risks should be covered by the social security system. Who pays? According to her, coverage must be separated from financing, and so also adapted. Note that, in France, the social security regime for self-employed workers

("RSI") has been part of the general social security regime since January 2018.

Given these societal changes and the expectations of young people, who are more individualistic than their elders, Marine Jeantet feels that it is "perhaps necessary to consider more individual systems."

Joachim Breuer emphasizes the need to integrate the new insurance solutions into the monopoly public system, because there is a real risk of levelling down by private insurers.

During the question session, Marine Jeantet warns that this policy of maintaining monopoly systems is based on a political decision which is not so obvious as all that.

Regarding the risks to be covered, the participants agree that they are not really new. PSRs, MSDs and commuting accidents are well known. What has changed is how we can act to prevent them, for want of unity of place, work rates, a work community, etc. Hence the need to be inventive.

The digital transformation is also an opportunity to attenuate painful working conditions and promote inclusion.

But the spread of applications to better prevent everyday risks, in a personalized manner, also raises the question of the limitations of such uses and the sensitive question of data protection.

The digital economy: an opportunity for occupational risk prevention

- **Marc MARANZANA**, Open Innovation and Digital Director, Groupe Colas
- **Bruno MAGNIN**, Health and Safety Director Bouygues Bâtiment International, President of ASEBTP (Safety Managers in construction companies)
- **Yann FAVRY**, Quality Health Safety and Environment System & Corporate Social Responsibility Manager, Schmidt Group
- **Lorenzo MUNAR**, Project Manager, European Agency for Safety and Health at Work (EU-OSHA)
- **Stéphane PIMBERT**, Director General, National Research and Safety Institute for the Prevention of Occupational Accidents and Diseases (INRS)

Several company representatives illustrated the benefits of digital technology for risk prevention. At Colas, an exoskeleton was designed to facilitate the work of asphalt rakers, whose job entails substantial physical exertion. A proven cause of MSDs. In 2009, a partnership was entered into with RP3D, a company which until then had worked in the military sector. The exoskeleton allows better synchronization of the acts of pushing and pulling, and reduces the weights handled. A video shown to the public illustrates the functioning of this innovation. Marc Maranzana emphasizes the importance of assisting change with ten pioneers to explain the advantages and benefits to the rakers. However, this solution remains costly: €25,000 for each raker. But according to Marc Maranzana there's no question of considering ROI: the company has to respond to a challenge of attractiveness of the job and population ageing. Bruno Magnin, for his part, tells of the contribution of the "digital model" for worksite design and work performance. "A tool now widely shared in the construction sector" which, while it was set up especially to ensure a better work organization, has proved to have positive repercussions on occupational safety and health.

"When you review incorrectly the work performed, you find yourself faced with challenges of painful conditions involved in redoing that work", says Bruno Magnin. This tool has therefore made it possible to tackle MSDs first, but not merely MSDs. The digital model eases the worker's mental burden, thanks to the reliability of the information recorded regarding

his environment. And it's a decision aid tool, "which has already revolutionized how we communicate concerning risk prevention," according to Bruno Magnin. And he adds that the tool operates extremely well with the new generations, but also confirms the usefulness of 3D videos to disseminate safety alerts. Yann Favry explains how the family group Schmidt, specialized in the manufacture of made-to-order kitchens, chose large-scale automation ten years ago and revised all its processes. Low-value-added, strenuous manual work stations were replaced with automated systems. At the same time, ergonomic scoring of the work stations was performed in order to establish a priority in the scale of painful working conditions to be dealt with. "Attenuating painful conditions improves productivity", repeats Yann Favry, who does not conceal the fact that this trend went hand-in-hand with fears for jobs. But the workforce has increased from 650 employees in 2001 to 1,800 at present. The personnel have been trained in their new jobs, more oriented toward machine management. There are still points to watch: sometimes over-confidence in the machine, pressure related to maintenance operations, and finally excessive assurance of the new generations faced with the risks. Lorenzo Munar, in charge of e-tool development at EU-OSHA, recalls the success of OiRA (Online interactive risk assessment), which allows dematerialized management of the "single document" for very small enterprises. There are about 50,000 users, more than one-third of them in France, and 70,000 risk assessments have been performed with

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OiRA. This tool is also used for self-training. But Lorenzo Munar points to a problem faced with VSEs which say they have no problems with risks, and which therefore ask why assess them.

The questions from the audience focused on the aid which the public OSH experts/institutions have provided or could provide for the dissemination of these tools. At Bouygues, Bruno Magnin says they have seldom called on institutionals, because they have in-house resources, notably human factors engineers. Yann Favry, for his part, is betting on training of his personnel, but plans to work with the Carsat fund and suggests, by the way, that the latter organization should enhance its internal expertise on the subject. Marc Maranzana emphasizes that innovative companies need support from public institutions to be able to develop their solutions. Stéphane Pimbert recalls that eight years ago the INRS undertook strategic planning work, on robots, nanotechnologies and platformization. The Institute also conducts work on exoskeletons and human-robot collaboration, notably to be able to influence the European standards and have an impact on risk prevention as of the design stage.

On the whole, these tools are beneficial to keep pace with population ageing and combat the increasing prevalence of MSDs. But we should be careful not to install them indiscriminately, warns Stéphane Pimbert, at the risk of causing other problems for their users. Another challenge: artificial intelligence. "There already exist safety sensors in clothing, to detect carried loads and vibrations; it is very positive, but if it

is used by the employer to calculate painful conditions we are more reserved regarding the objective," warns Stéphane Pimbert. On the subject of platformization, he suggests allowing for health and safety as of the software design and configuration stage, e.g. to include in them time for breaks. Some platforms are thinking about this, he says. He also warns about the importance of involving operators in the design and implementation of the new tools which will change their job. To facilitate these developments, Stéphane Pimbert does not call for more regulations, but believes more in social dialogue.

Finally, he points out that digital tools are tending toward greater personalization of OSH, whereas at present priority is given to the collective aspect. A participant in the question-and-answer session raises a question concerning the establishment of work communities. Stéphane Pimbert recognizes that the spread of NICT and connected objects will lead to the personalization of OSH and responsibility, and it will therefore be a problem reaching their users. To another question concerning the safeguards that society could provide for faced with hyper-control, hyper-specification and dehumanization, while trade unions are weakened, he gives the example of studies carried out to analyse the impact of voice commands in warehouses. Productivity has increased, but employees have often been unhappy with software instructions, which give orders conflicting with their experience of the job. He stresses that the large brands have reacted swiftly to eliminate these effects.

Conclusion of the Commission and the European social partners

- **Jorge COSTA-DAVID**, Principal Administrator, European Commission
- **John HARKIN**, Senior Policy Advisor, Ceemet
- **Thiébaut WEBER**, Confederal Secretary, European Trade Union Confederation (ETUC)

Thiébaut Weber recognizes that the introduction of new technologies can lighten the workload for workers, but warns that: "If this means imposing, like Amazon, infernal work rates without the presence of trade unions, the answer is no!" Regarding the platforms, he asserts that "When there is subordination, the platform must be responsible." John Harkin sees more opportunities than threats in the spread of the new technologies, but worries about the responsibility of employers with regard to the health and safety of nomadic workers, supposed to apply preventive measures without being on site. Likewise, when similar technologies are used in the private sphere and the work sphere, "the employer cannot be responsible for everything," he asserts. Social dialogue is therefore essential. In his opinion, one of the major changes concerns workplaces and the question of the balance to be found between private life and working life. He stresses the need to develop workers' skills, in particular to teach them to work with robots. According to Thiébaut Weber, the introduction of the new digital tools and their consequences for work organization should be a trade union issue for the new Social and Economic Committees (SECs). In Europe, these subjects are seldom present in social dialogue: "Moreover, we have proposed to Business Europe to

make this a theme of our discussion programme," says the trade unionist, "and the ball is in their court." To conclude, Jorge Costa-David asserts that "for the European Union, the digital economy is an opportunity and a risk, in that order." Moreover, the examples presented today also pointed in this direction. They also show that the digital economy is a vast subject, and that everything cannot be dealt with in the same way.

Platformization, Work 4.0, we are just starting to feel their effects, but it is clear that, on these subjects, social dialogue is essential. Hence the importance of the Luxembourg Consultative Committee and the working groups established. At present, the Commission is working out precautionary guidelines. When precautions are taken, this means that the risks have not necessarily been properly characterized. It should also be remembered that the European Commission works for about thirty countries, which correspond to different realities!

The Commission is not currently in a regulatory approach, but rather in a "soft law" approach. Why go down a restrictive path and "be nasty" in the event of non-application, if you can get there by dialogue? In this respect, the EU-OSHA report supervised by Katalin Sas is a good instrument in favour of risk prevention.