

CASE STUDY



DIGITAL PLATFORM WORK: THE BENEFITS OF PLATFORM COOPERATIVISM

1 The 'sharing' economy: between corporate promises and cooperative hopes

The past decade has been characterised by the explosion of the so-called sharing economy. From crowdsourcing to peer production and from social media to market aggregators, digital technologies have enabled new business models and companies to emerge that rely on the co-production of goods and services and the connection between previously isolated producers, workers and consumers. The fact that the largest transport company in the world, Uber, does not own any vehicles and that the largest encyclopaedia in the world, Wikipedia, does not produce its own content is a clear example of the revolutionary aspect of the sharing economy.

But the extent to which this new economy is really a 'sharing' one is hotly debated. Many of these new companies have built their brand and reputation on the sharing aspect of their business model. Uber, for instance, has repeatedly highlighted the fact that individuals can 'share' a car ride while heading in the same direction, or earn some extra money while dropping their kids off at school. But the reality is more complex than portrayed by many of these companies. While some companies can genuinely claim to actively promote sharing (a good example is Wikipedia, which is created through the open collaboration of thousands of volunteers from around the world), others, such as Uber and Amazon, are multi-billion dollar for-profit companies that have been widely criticised for the working conditions they offer, the taxes they pay and the contributions they make to the broader community (Woodcock & Graham, 2020; Schor, 2020; Hatzopoulos, 2016).

Some authors (see, for instance, Schor, 2020; Scholz, 2016) have come to talk of the sharing economy being hijacked by large corporations and losing its sharing character in favour of profit and market expansion. They claim that the promises of democratisation, collaboration and solidarity entailed in the concept of the sharing economy are no longer true, if they ever were. When it comes to labour standards, rather than promoting the wellbeing of workers, these corporate platforms have been shown to foster precarity and insecurity, eroding workers' rights and protection, also when it comes to occupational safety and health (OSH) (EU-OSHA, 2021, 2022a, 2022b, 2024). Nevertheless, besides the example of Wikipedia, there are many examples from around the world of organisations that can truly be said to make sharing, alongside the offer of better working conditions and better OSH, a key aspect of their business model.

In this case study report, we will present 'platform cooperativism', and more specifically worker cooperatives, as one of the main examples worldwide of a phenomenon that can present itself as an alternative to the prevailing corporate businesses that have come to dominate the digital economy and which can be said to stay true to the sharing principle, and in which better working conditions and OSH are made available to workers. Indeed, platform cooperatives have been able to mitigate many of the OSH risks present in the corporate platform economy, including precarity and insecurity, transparency and accountability in algorithmic management, and lack of collective voice and representation.

This case study is structured as follows. Section 2 presents the main features of platform cooperativism. Section 3 provides some examples of platform cooperatives from around the world. Section 4 discusses the main challenges and limitations of platform cooperativism. Finally, Section 5 concludes with what we should expect in the future.

2 Platform cooperativism: main features

A cooperative, also coop or co-op, is defined as 'an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise' (Platform Cooperativism Consortium, 2024b). Cooperatives in themselves are nothing new. Historically, they are almost as old as capitalism itself. The beginning of the cooperative movement can be traced back to the Rochdale Principles of 1844, although earlier examples of cooperative-inspired enterprises can even be found in medieval guilds as well as in tribal institutions. The Rochdale Principles were set out by the Rochdale Society of Equitable Pioneers in Victorian England and came to shape the way cooperatives still operate nowadays (ICA, 2024b). The principles, which were partly revised by the International Cooperative Alliance (ICA) on several occasions, outline the main characteristics of cooperatives. In the ICA's most recent phrasing, from 1995, they entail:

- 1. Voluntary and open membership.
- 2. Democratic member control.
- 3. Member economic participation.
- 4. Autonomy and independence.
- 5. Education, training and information.
- 6. Cooperation among cooperatives.
- 7. Concern for community.

For a detailed explanation of each principle, please see ICA (2024a).

As can be evinced, compared to corporate businesses, cooperatives emphasise the democratic participation of their members, in terms of both decision-making and ownership. In addition, in many cases, members-workers of cooperatives have an employment status for which they are entitled to the same rights and protections as normal employees, including OSH regulations, as explained later in this section. It is worth mentioning that in general (and even when members-workers of cooperatives are classified as self-employed, which means they are not covered by OSH regulations in most countries), platform cooperatives focus on the wellbeing of their members, including in working conditions, and their career development, through education, training and information, as well as of the community, both through collaboration with other cooperatives as well as with a concern for the wider society.

Even though the term 'cooperative' may bring to mind small businesses that play a marginal role in the capitalist economy, this is far from the truth. Around 40% of agricultural production in Brazil is managed by coops, while 36% of the retail market in Denmark is also managed by coops. Similarly, 45% of Kenya's and 22% of New Zealand's GDP comes from cooperative enterprises (Scholz, 2016).

However, it is important to remember that there is not necessarily a close overlap between cooperatives as legally defined and de facto cooperatives. Some businesses might take the legal form of a cooperative, without necessarily abiding by most cooperative principles, while at the same time, some enterprises that follow closely the cooperative principles might not take the legal form of a cooperative. That is why some authors prefer to define the latter as solidarity economy cooperatives (Grohmann, 2022).

While there are many types of cooperatives, depending on the ownership (consumer, producer, worker, multipartite), this case study report will only focus on worker cooperatives as they are the most relevant to discuss as regards working conditions, especially when it comes to OSH.

'Platform cooperatives' can be seen as a subset of cooperatives. They also adopt cooperative principles and their organisation is focused on shared ownership, fairer working conditions, including OSH, democratic decision-making and concern for the wider community. Their sector of activity is the digital economy and the technologies used have very much in common with those of digital labour platforms (EU-OSHA, 2022a, 2024).

Given the principles they abide by, platform cooperatives can be argued to more truly represent the sharing economy, by promoting shared ownership and shared governance as well as inter-business collaboration and attention to the wellbeing of their workers and the wider community. As such, they can constitute an important alternative to the corporate businesses that have come to dominate the digital economy. In digital platform work, workers are exposed to a range of OSH-related risk factors such as low and insecure pay, lack of health and safety equipment, lack of social protection, algorithmic

surveillance and control, discrimination and limited collective representation (EU-OSHA, 2024). The Fairwork project, for instance, has found platform cooperatives to provide on average fairer working conditions compared to other platforms (Fairwork, forthcoming). First, contrary to the vast majority of platform workers in corporate businesses, who are classified by platforms as self-employed, and thus excluded from most employment rights and protections as well as OSH regulations, cooperatives' platform workers are generally classified as employees. As such, they are entitled to employment rights and protections with OSH relevance including, among others, minimum pay, working time, personal protective equipment (PPE), accident insurance, social security and protection against discrimination (EU-OSHA, 2024). Moreover, through collective ownership and democratic governance, workers are able to shape internal decision-making and thus promote their collective wellbeing and improve their working conditions. This is particularly relevant when it comes to the use of algorithms and digital technologies that, in corporate platforms, generally lack transparency and accountability and have been shown to engender important OSH risks (Woodcock, 2021; Wood, 2021; EU-OSHA, 2022a). In platform cooperatives, the modalities and characteristics of the deployment of these digital technologies is instead decided by the coop members, thus supporting transparency and accountability and mitigating OSH risks. The Platform Cooperativism Consortium has also shown how platform coops can promote equality, inclusivity and sustainability, and pay more attention than corporate businesses to the quality of the work they create (Platform Cooperativism Consortium, 2024a).

This is also true when it comes specifically to OSH-related matters. Through the participation of the members-workers, which takes place through democratic decision-making, platform cooperatives are more apt than corporate businesses to pay attention to their members' priorities and needs, including in the area of OSH. Moreover, through the economic participation of their members- workers, it is more likely that they get a fair share of the earnings, thus preventing the risk of exploitation, low pay and income insecurity, typical of digital platform work. As part of their coop principles, they also put emphasis on training, which can include OSH training. Furthermore, their principles also include open membership, thus they are more likely than other businesses to promote inclusivity and prevent discrimination. When it comes specifically to the use of digital technology, democratic governance also means that the use of algorithms and other digital technologies can be made more transparent, and subject to the scrutiny and monitoring of the members-workers -of the platform.

3 Examples of platform worker cooperatives around the world

This section presents some examples of platform cooperativism from around the world from different sectors of the digital platform economy. It also discusses the implications of these business models for working conditions, with specific focus on OSH.

Born in France and with over 72 member coops in Europe, North and South America, and Australia, **CoopCycle** is a federation of bike delivery cooperatives. Its strength has been in the creation and development of the digital infrastructure (including the platform software and the smartphone app) as well as other services (such as commercial ones) to support the functioning of member coops. The software is open and free to members who, however, have to have a cooperative model and fit the definition of social economy actors as defined by the EU (CoopCycle, 2024; Muñoz Cancela et al., 2023). One of the main objectives of CoopCycle is providing an alternative model to what has been perceived as the exploitative business model of digital labour platforms by supporting the cooperative platforms that provide fairer working conditions to platform workers. The software itself is developed by the coop following cooperative values, and with the needs of workers in mind. It thus provides the transparency and accountability that corporate software mostly lacks.

Mensakas (Barcelona) and La Pájara (Madrid) are two Spanish delivery platform coops born out of frustration with the poor and untransparent working conditions of corporate delivery platforms. These coops' core mission is to put workers rather than capital at the centre. As cooperative members, workers are granted full OSH rights and protections, have clear and transparent working conditions, are not subjected to opaque algorithmic management and participate democratically in the governance of the platform. La Pájara was the best scoring platform in Spain according to Fairwork's labour standards evaluation (Fairwork, 2024).

Similarly, **Señoritas Courier** (Sao Paulo), is a Brazilian delivery platform run by women (including trans women). Its main objective is to integrate into the labour market traditionally disadvantaged groups in a

fair and independent way. Its workers are entitled to social security against many OSH risks, including accidents and sickness. The platform coop is run democratically, with workers being able to voice their challenges and decide collectively upon a solution. The coop also owns its own algorithm, which is subjected to workers' needs and scrutiny (Señoritas Courier, 2024).

The **Drivers Cooperative**, operating in New York City and Denver, United States, was created as an alternative to what were seen as exploitative digital labour platforms in New York's ride-hailing sector. Although the member drivers are still classified as independent contractors, and thus do not enjoy the same rights and protections of regular employees, they do enjoy important benefits. First, the cooperative provides higher pay, mostly by implementing lower commissions compared to other corporate platforms (15% versus 25-40%) but also through minimum fares per mile. As owners, drivers are also entitled to dividends from the coop. Further, unlike corporate platforms, it does not make use of dynamic pricing which, because of its automated and opaque characteristics, has been heavily criticised by many drivers for lack of transparency and for lowering earnings. Drivers regularly meet to make decisions over the governance of the coop, and they can vote on policies that best suit their needs. The decision-making process is thus transparent and democratic, and it has the potential to introduce further positive changes for the drivers.

Asoclim (Ecuador) and Ima Limpia (Colombia) are two domestic and care work platforms in Latin America. In countries where domestic work is mostly informal and characterised by low pay and insecurity, these two platforms have the aim to value their workers and foster fairer working conditions. For example, Asoclim was rated by Fairwork Ecuador as the platform with the highest labour standards in the country, being awarded 8 out of 10 points (Fairwork, 2023). Workers are paid at least the minimum wage after costs and are provided with PPE and health and safety training. Compared to other platforms in the domestic and care sectors, these platforms also offer clear and transparent working conditions, they have better communication with their workers, and no automated deactivation or disciplinary decision is implemented (Asoclim, 2024; Ima Limpia, 2024).

Similarly, **Up & Go** is a cleaning cooperative platform operating in New York City, United States. By cutting out the 'middlemen' and by applying fair pay, it pays its workers much more than corporate platforms, with the platform only withholding 5% of the workers' total earnings. Workers receive thorough training, including in the area of OSH, and by providing higher pay and allowing workers to decide their own schedule, it reduces overwork and offers a better work–life balance. Also, as owners, workers take part in the coop's decision-making process, making sure the coop responds to their needs (Up & Go, 2024; Pereira, 2022).

This brief list of examples is not meant to be in any way exhaustive and cannot fully cover the full range of sectors and activities in which platform coops are involved. It is only meant to provide a snapshot of some key examples of platform cooperativism from around the world. As can be seen, all these examples show that cooperative platforms place importance on the wellbeing of the worker and are able to mitigate important OSH risks, including in relation to pay, PPE, social security, contracts, communication, discrimination and collective voice.

4 Challenges and opportunities of platform cooperatives

Platform cooperatives face important challenges in their creation, development and long-term sustainability. At the same time, they offer important opportunities in the platform economy.

First, a major challenge is to **live up to the principles they embrace**. As we have seen, platform cooperatives can be an important alternative to the precarious and insecure working conditions as well as the lack of rights and protections of corporate digital labour platforms. This is true both when it comes to OSH and more broadly. We have shown that research indicates not only that platform coops tend to have fairer and more decent working conditions than other platforms, but that they put the needs and interests of their members-workers at the heart of their businesses (Fairwork, forthcoming; Scholz, 2016). Nevertheless, due to competition, adverse market forces and limited financial resources, platform coops might struggle to fulfil the cooperative principles previously outlined. This is particularly relevant for OSH-related matters. Platform coops might find it difficult to pay their members adequately, provide them with adequate OSH training and information, supply workers with protective equipment and give workers social protection, all of which have been shown to be relevant OSH risks in the platform economy (EU-OSHA, 2024). They might be tempted not to provide workers with those protections, especially in cases where it is not legally mandatory to do so. Providing high pay, free

protective equipment and accident insurance and paying for workers' social security all come at a cost. Thus, the ability of these types of platforms to provide fairer working conditions, also in relation to OSH, may often be hampered by financial sustainability limitations.

A second, partly related challenge has to do with sustainability. Many corporate platforms run at a loss, and even a company like Uber made its first profit only in 2023 (Jolly & Wearden, 2024). This is possible as their investors have fostered a 'growth before profit' strategy, where they put emphasis on the expansion of market share, postponing profitability to the future. The sustainability of this strategy has been repeatedly questioned and has shown its limitations with the rapid rise of interest rates and inflation in recent years (Colley, 2022). At the same time, they have often pursued cost-cutting strategies, including lowering pay, to undercut the competition. None of these strategies are available to platform coops which, on the one hand, do not rely on investors able to forgo financial sustainability in the medium and long term, and, on the other hand, are not willing to undercut the pay and working conditions of their members. This in association with the lack of scale means platform coops might present a competitive disadvantage compared to corporate platforms. At the same time, their more cautious and conservative financial strategies might make their businesses more sustainable, and there is evidence that coops die at a lower rate than other platforms (Scholz, 2016). Furthermore, they may position themselves in the market as more ethical and socially responsible businesses and partner with like-minded clients and customers, instead of competing purely on prices. As such, they might be able to rely on more stable and longer-term relationships, driven not only by price convenience and efficiency but also by ethical values, which include fairer and more decent working conditions for workers.

A third challenge is in relation to **funding**. As with other platforms and businesses in the digital economy, platform cooperatives face important funding issues, both for their initial set-up and for their development and consolidation. Unlike other businesses in the digital economy, they are less able to attract funding from traditional investors, venture capital or angel investors as their focus is often not on profit and the economic ownership of coops makes them less suitable for these sources of financing. In some cases, coops can find internal funding through their members, in others, they can be supported by external sources of funding, such as local governments, unions, NGOs or other civil society organisations interested in supporting those initiatives. In some cases, they can rely on existing networks of coops that, as we will see, can also support them through other challenges. Thus, to see these initiatives blossom, and with them see an improvement in working conditions in the platform economy, public institutions would need to fund and subsidise them, especially in the initial phase, before they can achieve financial sustainability.

A final challenge is that of the **use of technology**. The democratic control of the members over the use of algorithms and other digital devices makes platform coops less prone to many of the risks, including OSH-related ones, associated with algorithmic management and control. Many platform coops take pride in the transparent and accountable use of algorithmic tools and in ethical data policies, unlike their corporate counterparts. At the same time, in contrast with corporate businesses in the digital economy, platform coops are less likely to be able to afford to pay for expensive software technologies or to hire engineers and computer scientists to develop these technologies internally and to run them. A potential solution in this regard comes from the example of CoopCycle discussed earlier, which has been able to provide open-source software and support its adoption by its member coops. In other cases, coops have been able to rely on existing low-cost technologies, including WhatsApp, websites or other digital tools, to carry out most of their operations. The use of these simple technologies instead of sophisticated technologies involving the use of algorithms or Al for the allocation of tasks or performance monitoring is less likely to result in OSH-related risks. Nevertheless, they can also constitute an important limitation to the growth and expansion of these coops and, ultimately, might create a relevant competitive disadvantage vis-à-vis corporate platforms.

5 Conclusion

This brief case study report has shown what platform cooperativism is and the challenges and opportunities it faces in engendering a more ethical, democratic and inclusive digital economy, staying true to the term sharing economy. Of particular relevance for OSH matters is the ability of platform cooperatives to perform better compared to corporate platforms in terms of OSH rights and protections. It has been repeatedly shown the multiple challenges platform workers face and how poorly platforms generally perform when it comes to OSH (EU-OSHA, 2021, 2022a, 2022b, 2024). Given the principles

upon which platform cooperativism is based, and having the interest of workers at its heart, it has the potential to provide better and more encompassing OSH protections compared to corporate platforms.

Workers in platform coops tend to have similar rights and protections as employees and, even when they don't, coops tend to mitigate many of the OSH risks associated with not being employed (see EU-OSHA, 2024 for a detailed list), such as lack of guarantee of minimum pay, lack of working time regulations, unclear and non-transparent terms and conditions, lack of communication and due process, and protection against discrimination. At the same time, thanks to democratic governance and worker ownership, the OSH risks associated with the use of algorithms and automated decision-making are mitigated by the fact that these digital tools are under worker scrutiny and thus are made more transparent and accountable in their functioning and in the outcome they produce. Similarly, the use of personal data is under democratic control and scrutiny, thus reducing the potential OSH risks associated with an improper use of data by the platform.

But in order to be able to thrive and to live up to its principles, platform cooperativism necessitates regulatory support. On the one hand, platform coops face tough competition from corporate platforms that are often engaged in a race to the bottom in labour standards. It is still to be seen whether national and supranational legislation, such as the recently introduced EU Directive on Platform Work, can create a level playing field, guaranteeing basic rights to all platform workers, and thus enabling platform coops to compete on more equal grounds. As the directive still leaves the definition of the criteria for employment classification, on which most employment rights and protections depend, to individual Member States, it is likely that the situation will vary from country to country.

On the other hand, legislation for the formation and the development of coops also varies significantly between countries and subnational levels, with some jurisdictions providing more supportive frameworks in terms of taxation, registration and rules for the establishment of platform cooperatives than others. At the same time, the EU and governments, but also regions and municipalities, can provide direct support through subsidies to sustain and foster these initiatives, and can promote training and information for prospective coops and coop members, while also facilitating the formation of networks of coops, as has historically been done for more traditional coops, for instance, in the regions of Emilia Romagna (Italy) and the Basque Country (Spain).

References

- Asoclim. (2024). ASOCLIM: Servicios profesionales de limpieza del hogar y empresas. https://www.asoclim.com/
- Colley, J. (2022, June 16). Will gig economy takeaway firms survive the cost of living crisis? Warwick Business School. https://www.wbs.ac.uk/news/will-gig-economy-takeaway-firms-survive-the-cost-of-living-crisis/
- CoopCycle. (2024). We socialize bike delivery. https://coopcycle.org
- EU-OSHA European Agency for Safety and Health at Work, *Digital platform work and occupational* safety and health: a review. European Risk Observatory Report, 2021. Available at: https://osha.europa.eu/sites/default/files/2021-11/OSH policies online platform economy.pdf
- EU-OSHA European Agency for Safety and Health at Work, Digital platform work and occupational safety and health: overview of regulation, policies, practices and research, 2022a. Available at: https://osha.europa.eu/sites/default/files/2022-03/Digital_platform_work_OSH_policies_report_0.pdf
- EU-OSHA European Agency for Safety and Health at Work, *Digital platform work: occupational* safety and health policy and practice for risk prevention and management, 2022b. Available at: https://osha.europa.eu/sites/default/files/Digital platform%20work EN.pdf
- EU-OSHA European Agency for Safety and Health at Work, Securing safer, fairer conditions for platform workers: key regulatory and policy developments and challenges, 2024. Available at: https://osha.europa.eu/en/publications/securing-safer-fairer-conditions-platform-workers-key-regulatory-and-policy-developments-and-challenges

- Fairwork. (2023). Fairwork Ecuador Ratings 2023: Working conditions in unsafe contexts. https://fair.work/wp-content/uploads/sites/17/2023/11/Fairwork_Ecuador_Report_2023-1.pdf
- Fairwork. (2024). Fairwork Spain Ratings 2024: A long way to go for labour protection in the platform economy. https://fair.work/wp-content/uploads/sites/17/2024/06/Fairwork-Spain-Report-2024_EN-WEB.pdf
- Fairwork. (forthcoming). Solidarity Platform Cooperativism in Latin America Report.
- Grohmann, R. (2022). Beyond platform cooperativism: Worker-owned platforms in Brazil. *Interactions*, 29(4), 87-89. https://dl.acm.org/doi/abs/10.1145/3540251
- Hatzopoulos, V. (2016). The collaborative economy and EU law. Bloomsbury Publishing.
- ICA. (2024a). Cooperative identity, values & principles. International Cooperative Alliance (ICA). https://ica.coop/en/cooperatives/cooperative-identity
- ICA. (2024b). *The Rochdale Pioneers*. International Cooperative Alliance (ICA). https://ica.coop/en/rochdale-pioneers
- Ima Limpia. (2024). Tu Aliada en el Hogar. https://imalimpia.com/
- Jolly, J., & Wearden, G. (2024, February 7). Landmark moment as Uber unveils first annual profit as limited company. The Guardian.

 https://www.theguardian.com/technology/2024/feb/07/landmark-moment-as-uber-unveils-first-annual-profit-as-limited-company
- La Pájara. (2024). La Pájara Ciclomensajeria. https://lapajaraenbici.com/
- Mensakas. (2024). Cuidamos Los Derechos De Las Personas. Delivery responsable en bicicleta. https://www.mensakas.com/es/
- Muñoz Cancela, C., Kasparian, D. R., & Grasas, M. J. (2023). Análisis socio-técnico de la implementación argentina de la plataforma cooperativa CoopCycle. *Otra Economía*, 16(29), 41-59. https://ri.conicet.gov.ar/handle/11336/230246
- Pereira, S. (2022, May 24). *Meet a Worker Co-op: A cleaning platform changing the gig economy.*Hell Gate. https://hellgatenyc.com/meet-a-worker-co-op-cleaning-services
- Platform Cooperativism Consortium. (2024a). *Vision & Advantages*. https://platform.coop/about/vision-and-advantages/
- Platform Cooperativism Consortium. (2024b). What is a platform co-op? https://platform.coop/
- Scholz, T. (2016). Cooperativismo de Plataforma. Desafiando la economía colaborativa corporativa.

 Dimmons Investigación acción en producción procomún, Internet Interdisciplinary Institute,
 Universitat Oberta de Catalunya. https://dimmons.net/wp-content/uploads/2016/05/mag_Trebor-Scholz_COOP_PreF_DP.pdf
- Schor, J. (2020). After the gig. How the sharing economy got hijacked and how to win it back.
 University of California Press.
- Señoritas Courier. (2024). Ciclologística por mulheres e pessoas trans. https://senhoritascc.com.br/
- The Drivers Cooperative. (2024). Ready to drive? https://drivers.coop/
- Up & Go. (2024). Refreshed home, reliable people, renewed you. https://www.upandgo.coop/pages/about
- Wood, A. J. (2021). Algorithmic management: Consequences for work organisation and working conditions. European Commission, JRC124874. https://joint-research-centre.ec.europa.eu/reports-and-technical-documentation/algorithmic-management-consequences-work-organisation-and-working-conditions_en
- Woodcock, J. (2021). The limits of algorithmic management: On platforms, data, and workers' struggle'. South Atlantic Quarterly, 120(4), 703-713. https://doi.org/10.1215/00382876-9443266
- Woodcock, J., & Graham, M. (2020). The gig economy: A critical introduction. Polity.

Author: Alessio Bertolini — Oxford Internet Institute, University of Oxford and Fairwork project.

Project management: Maurizio Curtarelli, Emmanuelle Brun — 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.