HUNGARIAN LABOUR LAW
E - J O U R N A L

Algorithmic Management in the Workplace: taking Stock of Case Law and Litigation in Europe

Christina Hiessl*

1. Introduction

Digitalisation has had a profound and sustained impact on the labour market in numerous ways. From a legal perspective, work in the digitalised economy has raised a number of new questions, together with a perhaps greater number of old questions presenting themselves in a new light.

In legal practice, the latter group has clearly prevailed so far. To illustrate, the one probably most decisive and divisive question at the heart of the gig economy debate is the very old question of employee status – which has led to hundreds of cases brought before courts and administrative institutions in Europe regarding the classification of platform workers.[1] At the other end of the scale, new and specific types of regulation, which raise a number of fundamental questions on their applicability in the employment context that would benefit from judicial clarification – such as the Regulation 2019/1150 (Platform-to-Business or P2B Regulation) – do not seem to have been invoked in any concrete instance of pertinent litigation so far.[2]

Between those two poles, there is the issue of algorithmic management, which is beginning to play a role in litigation in European countries. Such litigation deals with questions in terms of whether and in what form a worker can be subjected to automated decision-making, and what duties its use implies for the employer or principal. It is a cross-cutting issue, of relevance both for those who – potentially as a result of protracted litigation about their status – are recognised as employees under

* Professor of Labour Law (KU Leuven). This research has received financial support from the European Union Programme for Employment and Social Innovation "EaSI" (2014-2020).

1 See Christina Hiessl: The classification of platform workers in case law: A cross-European comparative analysis. *Comparative Labour Law & Policy Journal* (CLLPJ), vol. 42, no. 2 (2022), 465–518.; Nastazja Potocka-Sionek: Easier done than said? An empirical analysis of case law on platform work in the EU. Forthcoming in *Hungarian Labour Law E-journal,* 2023/1.

2 See Jakub Tomšej: Protection of Gig Workers against Contract Termination: Not for Everyone? In: José María Miranda Boto – Elisabeth Brameshuber (eds.): *Collective Bargaining and the Gig Economy. A Traditional Tool for New Business Models.* Hart Publishing, 2022. 167–178.

national law, and those who find themselves outside most or all of the protection of employment law (with uncertainties persisting about the applicability of protections e.g. under Article 4 of the P2B Regulation). After all, both the General Data Protection Regulation 2016/679 (hereinafter: GDPR) and non-discrimination rules – as the primarily relevant sources of law for questions of algorithmic management – have a wide personal scope, which quite clearly covers all situations of "workers" in the broadest sense of the word.[3]

In recent years, not only academics, but also legislators, social partner organisations and international organisations have shown a keen interest in the legal questions emerging from algorithmic management.[4] So far, most of these have remained on an abstract level, for lack of a possibility to investigate those issue in the individual case in the way this is done in judicial or administrative proceedings. There is a clear gap in information about the cases in which such proceedings have been brought until now. In what follows, this article will aim to close this gap by taking stock of the known instances of legal disputes regarding algorithmic management, including decided, settled and ongoing cases, before courts as well as administrative bodies (notably the data protection authorities in the sense of Article 51 GDPR). Section 2 will give a descriptive overview of the situation as it evolved across Europe over the roughly four years since the first cases emerged; Section 3 will analyse the legal questions involved with a focus on their relevance from a European law perspective; Section 4 concludes.

2. Overview of decisions by courts and administrative bodies, settled and ongoing disputes

The story of GDPR-related litigation about algorithmic management in the employment context so far starts and ends with Uber being successfully sued at its European seat in Amsterdam. This is where an international collaboration of workers' associations (App Drivers & Couriers Union ADCU; International Alliance of App Transport Workers IAATW; Worker Info Exchange WIE[5]) decided to launch a couple of test cases[6] relying on Articles 15 and 22 GDPR.

The coalition first achieved a remarkable "scholar's mate" with a lawsuit brought in late 2020, which apparently hit Uber off-guard, to the effect that the company did not react or appear before the court, was sentenced in absentia in February 2021 to reinstate the drivers who claimed they had been "robo-

3 For the GDPR, see Article 4, referring to "identified or identifiable natural person ('data subject')". For discrimination law, see e.g. cases concerning self-employed workers (as in C-356/21, TP) and trainees (as in C-344/20, S.C.R.L., or C-485/20, HR rail).

4 For an overview, see Sara Baiocco et al.: The Algorithmic Management of work and its implications in different contexts. *Background Paper Series of the Joint EU-ILO Project*, n°9, 2022. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_849220.pdf

5 Run by the former drivers who acted as claimants in the famed UK Supreme Court case on worker status (Uber BV & Ors v Aslam & Ors [2021] UKSC 5 (19 February 2021)). https://www.supremecourt.uk/press-summary/uksc-2019-0029.html

6 Each regarding the situation of a small number of drivers in the UK and Portugal.

fired" by an algorithm,[7] and subsequently claimed that it had not been aware of the proceedings.[8] When the union coalition doubled down with three more lawsuits against Uber and Ola, platforms were prepared. The first-instance judgments by the Amsterdam Civil Court in March 2021[9] ended up granting claims for information about algorithmic management only to a very limited degree. All three of them have now very recently been overruled in favour of the claimants by the Amsterdam Appeals Court.[10] As a result, both platforms will be forced to reveal comprehensive information about their algorithmic decision-making within 1-2 months after the judgments, which were handed down on 4 April 2023. This is irrespective of a potential appeal to the Dutch Supreme Court, as the judges did not grant suspensive effect.

The courts' assessment of these cases offers a unique insight into the issues of interpretation of Articles 15 and 22 GDPR, which will constitute a major point of reference in the analysis presented below.

The saga of Uber is by no means completed, nor is it restricted to the Netherlands. Yet, there are signs that at least the company's assessment via the "administrative route" will again be concentrated in the Netherlands, more specifically the Dutch Data Protection Authority (Autoriteit Persoonsgegevens, AP), considering that at least its French counterpart (Commission nationale de l'informatique et des libertés, CNIL) has recently referred a number of claims (brought in June and September 2020, February and July 2021) to the AP based on Articles 56 and 60 GDPR.

Meanwhile, the "judicial route" seems to shift increasingly to the UK. This started with a couple of decisions in the course of 2021, which ordered Transport for London (TfL) to reinstate the private hire licenses of drivers which it had withdrawn without further investigation upon notification by licensed private hire operators (mostly Uber as the largest operator) that the drivers had been found to engage in fraudulent behaviour (notably passing their platform account data on for use by non-licenced individuals). Without the licence, the drivers had been unable to work for any of the platforms where they were registered (including platforms such as Uber, Kapten and Bolt).[11] More recently, the same union coalition which successfully litigated against Uber in the Netherlands announced to be preparing claims regarding specifically Uber's or Ola's automated facial recognition tests. These include i.a. elements of indirect race discrimination, as the software at issue is considered most likely to fail to

7 Rechtbank Amsterdam 24 februari 2021, ECLI:NL:RBAMS:2021:1415

8 See e.g. Joel Hills: Dutch court orders Uber to reinstate six drivers fired for app fraud. *ITV* of 14/4/2021.

9 Rechtbank Amsterdam 11 maart 2021, ECLI:NL:RBAMS:2021:1020 ; Rechtbank Amsterdam 11 maart 2021, ECLI:NL:RBAMS:2021:1018 ; Rechtbank Amsterdam 11 maart 2021, ECLI:NL:RBAMS:2021:1019.

10 Gerechtshof Amsterdam 4 april 2023, ECLI:NL:GHAMS:2023:796 ; Gerechtshof Amsterdam 4 april 2023, ECLI:NL:GHAMS:2023:804 ; Gerechtshof Amsterdam 4 april 2023, ECLI:NL:GHAMS:2023:793. At this point, it is unclear whether Uber plans to appeal the judgments before the Supreme Court.

11 See Cansu Safak – James Farrar: Managed by Bots: Data-Driven Exploitation in the Gig Economy. WIE of 13/12/2021

correctly identify minority groups. One test case concerning a single Uber Eats driver has been brought before the East London Employment Tribunal, which ruled the claim admissible in July 2022.[12]

Apart from this pending case, litigation and investigations regarding algorithmic management in the food delivery sector have so far been strongly concentrated in Italy. This starts with a famed ruling of the Bologna Civil Court of December 2020,[13] which was not only the very first judgment on algorithmic management in Europe but – pending the outcome of the aforementioned lawsuit against Uber Eats in the UK – remains the only decision on the potential discriminatory effects of algorithms. Such effects were confirmed by the Court in relation to Deliveroo's former shift reservation system. Subsequently, in the summer of 2021, the Italian data protection authority (Garante per la protezione dei dati personali, GPDP) issued two decisions on Foodinho/Glovo and Deliveroo.[14] Both platforms were found in gross violation of numerous provisions of the GDPR and imposed multi-million fines in combination with orders to amend their algorithms and transparency policies. Again, these decisions by a data protection authority were the first and so far only of their kind in Europe. Finally, and most recently, Italy has also become the first country in which a case (against Uber Eats, tried before the Palermo Civil Court[15]) could be decided based on new, tailor-made national legislation which made the tedious tasks of assessing access requests under the GDPR obsolete, as will be described infra at 3.2.6.

From the procedural files of the Italian authority, it can be inferred that investigations are ongoing by the competent national bodies in respect of the parent companies of the platforms involved (Glovo in Spain and Roofoods in the UK).

Amazon has entered the arena more recently, though (perhaps surprisingly) not in relation to its "flex" drivers, who are subject to algorithms that roughly compare to those used in the food delivery sector. Instead, the main focus at present seems to be on warehouse workers, in respect of which a union/NGO coalition has recently filed a number of data access requests in a number of European countries.[16] In the meantime, a decision of the data protection authority in Lower Saxony (Landesbeauftragte für den Datenschutz, LfD), which meant to prohibit Amazon from continuing to use key elements of its algorithmic warehouse management, was overruled by the Hanover Administrative Court in February 2023.[17] Yet another segment of Amazon's tech workforce has recently come to the fore in the context of a complaint lodged before the Luxembourgish data protection authority (Commission nationale pour la protection des données, CNPD) via the NGO NOYB (None of Your Business, founded by experienced GDPR litigator Max Schrems). It claims the violation of a number of GDPR provisions in the course of the automated rejection of an applicant aspiring to be admitted to the

12 Mr P E Manjang v Uber Eats UK Ltd and others: 3206212/2021 Employment Tribunal decision

13 Tribunale di Bologna – Sez. Lavoro – R.G. n. 2949/2019.

14 Garante per la protezione dei dati personali, Ordinanza ingiunzione nei confronti di Foodinho s.r.l. - 10 giugno 2021 [9675440] and Ordinanza ingiunzione nei confronti di Deliveroo Italy s.r.l. - 22 luglio 2021 [9685994]

15 Tribunale di Palermo – Sez. Lavoro – R.G. n. 645/2023

16 Amazon Workers demand Data-Transparency. *NOYB* of 14/3/2022, https://noyb.eu/en/amazon-workers-demand-data-transparency.

17 VG Hannover (10. Kammer), Urteil v. 09.02.2023 – 10 A 6199/20, ECLI:DE:VGHANNO:2023:0209.10A6199.20.00.

Amazon Mechanical Turk (AMT) crowdwork platform and her inability to receive an explanation or clarity about the person or even company in charge.[18]

Finally, there is a small number of known disputes regarding algorithmic management by companies outside the platform economy, concerning notably dismissals (as in case of collective redundancies at airline company TAP in Portugal[19] and terminations by cosmetics company Estée Lauder UK & Ireland[20]). So far, none of these has resulted in a judicial or administrative decision on merits so far.

The annex to this contribution contains an overview of all cases which have led to a judicial or administrative decision.

3. Legal issues addressed in the disputes

The scarce existing case law offers some first considerations in relation to the key provisions which determine workers' rights in the context of algorithmic management. Among the provisions of EU law, the overarchingly most relevant piece of legislation is clearly the GDPR, followed by the various non-discrimination provisions. Regarding workers' right to information, also Directive 2019/1152 could be of relevance in addition to GDPR-based rights. In what follows, the analysis of this key question of information rights in the context of algorithmic management will be preceded by an exploration of the rules which determine whether algorithmic management is legal in the first place.

3.1. Permissibility of automated decision-making

Article 22 (1) GDPR prohibits "decision[s] based solely on automated processing, including profiling, which produce […] legal effects concerning [the data subject] or similarly significantly affects him or her". The remaining paragraphs of that Article provide for a strictly defined system of exceptions to this prohibition. Provided that a system of algorithmic management passes this test of basic legality, it may still be unlawful if it has discriminatory effects or violates additional requirements stipulated under national law.

All these aspects have, to some extent, been discussed in the existing case law.

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18 Réclamation auprès de la Commission nationale pour la protection des données, C-053, 22/12/2021.

19 In which a preleminary injunction suspending the dismissal of seven crew members of the airline company has been granted by the Lisbon Appeals Court. See Tribunal da Relação de Lisboa, Providência cautelar de 09 Abril 2022.

20 Which has been settled out of court. See Susan Thompson – Andrew Lloyd: Sacked by an algorithm: can employment law keep up with advances in technology? *Relocate Global* of 17/5/2022.

3.1.1. Solely automated decisions and profiling

The algorithmic decisions that were found (in the decision of the respective court or agency) to be based solely on automated decision-making in case law so far concerned

- the assignment of riders/drivers to customers (Glovo's "Jarvis" and Deliveroo's "Frank" algorithm,[21] and Uber's and Ola's matching systems[22]);
- the (re-)assignment of warehouse employees to work areas and tasks (Amazon's "Fulfillment Center Labor Management" (FCLM)[23])
- the determination of the pricing of rides (and thus the driver's remuneration – Uber's Upfront pricing system) and granting of monetary bonuses to a driver (Ola's Earnings profile);[24]
- riders' opportunity to book shifts for work (Deliveroo's former shift reservation system and Glovo's "System of excellence");[25]
- the automated generation of a notification of platform administrators about irregularities that may indicate safety issues (Ola's "Guardian" system);[26]
- the automated generation of a draft for the feedback supervisors give to warehouse employees (Amazon's "Associate Development and Performance Tracking" (ADAPT)[27])
- the automated generation of a profile which labels a driver likely to engage in fraudulent behaviour (Ola's Fraud probability score and Uber's equivalent algorithm);[28]
- the imposition of deductions and penalties on drivers (Ola's algorithm);[29]
- the temporary blocking of a driver's account in case of a suspicion of fraudulent behaviour (Uber's algorithm);[30] and
- the permanent deregistration of drivers from a platform (Uber's algorithm).[31]

Additionally, the existence of algorithmic decision-making has been claimed by the parties involved in a dispute in relation to

- recruitment decisions of a crowdwork platform (Amazon Mechanical Turk);[32]

21 Decisions of the Italian data protection authority (n. 13).

22 Decisions of the Amsterdam Civil and Appeals Court (n. 9).

23 Decisions of the Hanover Administrative Court (n. 16).

24 Decisions of the Amsterdam Civil and Appeals Court (n. 9).

25 Decisions of the Italian data protection authority (n. 13).

26 Decisions of the Amsterdam Civil and Appeals Court (n. 9).

27 Decisions of the Hanover Administrative Court (n. 16).

28 Decisions of the Amsterdam Civil and Appeals Court (n. 9)

29 Ibid.

30 Ibid.

31 Ibid.

32 Case pending before the Luxembourgish data protection authority (n. 17).

– verification of identity (as a basis for an accusation of fraud: Uber);[33] and
– the selection of employees to dismiss (Estée Lauder; TAP).[34]

Few rulings address cases of mixed decisions, in which human decision-making relies substantially on algorithmic conclusions or profiling. These raise the question whether human involvement in this context needs to reach a certain substantive intensity for the decision not to be considered "based solely on automated processing" within the meaning of Article 22 (1) GDPR.

The Italian Data Protection Authority in any event rejected Glovo's argument that its use of algorithms could escape a classification as decision-making based solely on automated processing by the mere fact that human activity was required for the pre-setting of the parameters and possible corrections (which concerned only a small minority of riders). At the other end of the scale, the Hanover Administrative Court found that the draft feedback generated by Amazon's ADAPT algorithm was indeed just a suggestion, which supervisors were free to use – so that the feedback process as a whole did not come under the scope of Article 22 (1).

The most interesting case of the deregistration of Uber drivers (which has been challenged before a number of bodies in different countries) is complicated by the lack of transparency of Uber's actual practices in this regard. In the judicial procedure in the Netherlands, only the second-instance Court expressly defined the criteria by which it assessed the "meaningfulness" of human involvement. Referring to the Article 29 Working Party's Guidelines,[35] it found that such involvement could only be meaningful if the human involved was sufficiently qualified, informed and competent to make a decision which considers all relevant sources of information. Significantly, the Court also found that, at least under national procedural law, the applicants' claim that such human involvement was absent could be considered proven if they brought a prima facie case which Uber could not rebut based on an aggravated standard of proof. This seems an important feature of procedural rules, as claimants in comparable cases will regularly have no knowledge o[36]f the defendant's actual practices of human review, but will usually be able to indicate if – as the Uber drivers in casu – they were not even heard before the decision was taken.

The deregistration of Uber drivers, as well as Ola's more subtle practice of silently discontinuing the allocation of ride offers to certain drivers, both for reasons of suspected fraudulent behaviour,

33 Case pending before the East London Employment Tribunal (n. 11).

34 Case pending before the Portuguese judiciary (n. 18) and settled dispute in the UK (n. 19).

35 Article 29 Working Party, Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679 (wp251rev.01): "To qualify as human involvement, the controller must ensure that any oversight of the decision is meaningful, rather than just a token gesture." The Article 29 Working Party was the predecessor of the European data protection board (Article 68 GDPR).

36 Cf. the similar findings of AG's opinion in the pending request for a preliminary ruling in C-634/21 (*SCHUFA*) (to which the Amsterdam Appeals Court refers in a different part of its decision), which considers that a decision should be considered fully automated if internal guidelines virtually force the human involved to just rubber-stamp the algorithm's findings (paragraph 46).

were also the only instances in which the Amsterdam Appeals Court considered the conditions for profiling in the sense of Article 4 (4) GDPR[37] fulfilled.

3.1.2. Decisions producing legal or "similarly significant" effects

In respect of the requirement stipulated by Article 22 GDPR that the decision produce effects that are at least "similarly significant" as legal effects, the benchmarks used by different decision-making bodies are highly divergent, as is the degree to which the standard used is expressly clarified.

Most strikingly, the Hanover Administrative Court mentioned Article 22 GDPR only in relation to Amazon's ADAPT system (see last subsection), not its FCLM mechanism, although the latter is clearly based on fully automated decision-making. One might conclude that the Court implicitly found the assignment of employees to different tasks (which Amazon was indisputably entitled to decide on in its capacity as legal employer) insufficiently significant to raise questions under Article 22. At the other end of the scale, the Italian Data Protection Authority, without much further comment, stated that Glovo's and Deliveroo's slot booking systems, as well as the algorithmic matching of riders and customers, "produce legal effects or in any case significantly affect the person of the interested party" before moving on to examine the applicability of exceptions under Article 2 (2) GDPR.

Only the Dutch courts expressly addressed the question of how to determine the threshold of significance, and came to very different conclusions. The Amsterdam Civil Court put an emphasis on the Working Party's Guidelines (see last subsection) as amended in February 2018. Those state i.a. that "the decision must have the potential to significantly affect the circumstances, behaviour or choices of the individuals concerned; have a prolonged or permanent impact on the data subject; or at its most extreme, lead to the exclusion or discrimination of individuals". Additionally, the Court referred to the examples named in Recital 71 of the preamble to the GDPR (automatic refusal of an online credit application or e-recruiting practices). On this basis, it found that the threshold of significance that triggers the prohibition under Article 22 (1) GDPR was not met with respect to most of the instances of automated decision-making in the cases before it – the assignment of drivers to customers, the determination of the pricing of rides and granting of monetary bonuses to drivers, or the temporary blocking of a driver's account in case of a suspicion of fraudulent behaviour.

The Appeals Court disagreed in respect of all of the categories just mentioned, pointing to the fact that all of these decisions were of key relevance for the basic viability of work as a driver in the platform economy – as partly exemplified by the very cases before it, which included drivers who were suspended, deregistered or no longer offered any rides. Apart from these cases of a loss of work

[37] "[…] any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements".

opportunities, the Court expressly found the standard met in respect of all aspect of the algorithm that determined the drivers' incomes (and not only Ola's system for imposing deductions and penalties, which was the only one recognised as significant enough by the first-instance Court). The only aspect which both courts agreed to consider outside the scope of Article 22 GDPR were algorithms which only notified the employer, as in Ola's Guardian system (see supra at 3.1.1). [38]

All in all, the fact that both courts expressly based their widely diverging assessments on the Working Party's Guidelines shows the legal uncertainties that remain in spite of these clarifications at EU level.

3.1.3. Exceptions to the prohibition

Solely automated decisions which meet the threshold of significance as just described are prohibited by Article 22 (1) in principle, but may be "rescued" by reliance on Article 22 (2), which grants exceptions notably in case of the systems necessity for a contract with the data subject and/or the latter's explicit consent. Clearly, both options seem highly relevant for algorithmic management at work. However, legality in these instances is conditional on "suitable measures" to safeguard the data subject's rights, which must "at least" include the right to obtain human intervention (and to express his or her point of view and to contest the decision). Obviously, this raises questions as to how meaningful human intervention could be conceived in the context of highly automated business models as used by platform companies.

Case law so far does not give an answer to these questions. As explained in the preceding subsection, the Amsterdam Civil Court found automated data processing falling under the prohibition of Article 22 (1) GDPR to exist only in relation to Ola's system for imposing deductions and penalties. In this respect, the Court merely noted that a justification under one of the indents of Article 22 (2) had neither been claimed by Ola nor did it seem evident based on the case file. It thus concluded cursorily that the applicability of any exemption could not be assumed. The Appeals Court did not even mention the question, considering that it only needed to decide about the existence and degree of drivers' right to information under Article 15 (1) h (see infra at 3.2) – which it found to exist irrespective of whether the use of the algorithm was as such legal. Similarly, the Italian Data Protection Authority did not go into much detail regarding Article 22 (2), simply noting that while a justification was possible notably if automated decision-making was necessary for the performance of a contract between the data subject and a data controller (indent a), the finding of illegality was in any event not invalidated, as Glovo and Deliveroo had clearly failed to implement measures in the sense of Article 22 (3) GDPR.

[38] Arguably, this case is comparable to those featuring meaningful human involvement, as the suspicion of a potentially unsafe situation concerning the driver is verified by a human phone call.

3.1.4. Non-discrimination

One of the stated aims of the GDPR is to support the prevention of discrimination, as referred to in Recitals 71, 75, and 85. The assessment of discriminatory effects resulting from algorithmic management in case law has so far been limited to one decision by the Bologna Civil Court, with potential further exploration to be expected in the pending case before the East London Employment Tribunal.

Deliveroo's formerly used algorithm as assessed by the Bologna Civil Court effectively penalised both absences on short notice and low work participation during periods of high demand, without regard for the reasons. The Court expressly found this to violate the prohibition of (indirect) discrimination based on belief in the sense of Article 1 of Directive 2000/78/EC, which is considered to include trade union membership according to domestic case law in Italy. It also referred to a discrimination of workers with family responsibilities, so that – albeit not explicitly mentioned by the Court – also the prohibition of indirect discrimination under Article 14 of the Recast Directive 2006/54/EC and Article 11 WLB Directive 2019/1158/EU were arguably affected.

The Court expressly referred to CJEU case law such as the judgment in Case C-507/18 (NH) when confirming that the claimant trade union association could be considered an organisation with "a legitimate interest in ensuring that the provisions of this Directive are complied with" within the meaning of Article 9 (2) of Directive 2000/78. This was based both on the express reference to combating discrimination in the statutes of the claimant organisation and the inherent interest of a trade union to protect workers wishing to exercise their right to strike. Since the latter was considered an identifiable group sharing a certain belief as protected by Directive 2000/78, the trade union could claim on its behalf without needing to prove that any of the union's members was concretely affected by the discriminatory effects of the algorithm.

While not explicitly mentioning Article 10 of Directive 2000/78/EC, the Bologna Civil Court referred to domestic implementing legislation and CJEU case law on gender discrimination to find that the claimants merely had to adduce facts from which it could be presumed that there had been discrimination. This specifically concerned the parameters used by the algorithm, as the information Deliveroo had provided to riders clearly indicated that shifts needed to be cancelled 24 hours in advance to avoid adverse consequences for the rider's score. It was thus insufficient that Deliveroo claimed that in fact also later cancellations were without consequences, as long as the company failed to disclose the exact operating rules of the algorithm.

In line with Article 2 (2) (b) (i) of Directive 2000/78/EC, the Court assessed the presence of a legitimate aim, appropriateness and necessity required to justify the indirect discrimination of persons with a particular belief by penalising trade union activity. In the case at hand, the Court found it sufficient to point to a clear absence of indications that the measure was necessary, since the system operated

by Deliveroo allowed for corrections of the algorithmic outcome in certain cases, without an apparent reason why an extension of this mechanism to the protected groups would not have been possible.

3.1.5. Additional requirements under national law

Article 88 GDPR gives the Member States a broad margin for the introduction of "more specific rules" to ensure employees' rights to data protection. Some Member States have used this possibility to specify the permissibility of algorithmic management in particular; others have put in place more general rules about data processing by employers, which affect the latter's options to set up a system of algorithmic management.

The only body referring to a violation of specific national preconditions for automated decision-making in the context of employment is the Italian Data Protection Authority. The provision at issue is Article 114 of the Italian implementing legislation to the GDPR (Legislative Decree 30 June 2003). This provision allows automated data processing only for specific purposes and basically requires the conclusion of a collective agreement, or alternatively a formal permission of the labour inspectorate. Accordingly, one of the violations found in relation to Glovo and Deliveroo was that they had not engaged in any consultations when setting up their policy of algorithmic management.

The German decisions in turn stand out by the virtual absence of an assessment of the algorithmic decision-making as such and a near-exclusive focus on the permissibility of collection of the data needed to feed the algorithm under national law. Pursuant to Section 26 of the German implementing act to the GDPR (Bundesdatenschutzgesetz, BDSG), data processing is legal only if necessary for a decision on the establishment, or for the implementation or termination of an employment relationship. In practice, this is assessed by weighing the interests of the parties against each other.[39] The Hanover Administrative Court's evaluation in comparison to that of the Data Protection Commissioner (which is overruled in its entirety) evidences the difficulty of assessing the elements that are decisive for the protection of employees' fundamental interests in this context. Notably the consultation of employees' representatives as witnesses led the Court to conclude that an algorithm which is fully transparent and understandable to employees in its purpose and functioning can be experienced as preferable to "more subjective" human supervision. This element was key in its finding that Amazon's interest in upholding the system was not overridden by fundamental interests of employees.

[39] It should be noted that the CJEU's recent decision in Case C-34/21 (Hauptpersonalrat) has held in respect of i.a. Section 26 BDSG that it can be upheld as implementation legislation to Article 88 GDPR only insofar as it fulfils the conditions of Article 88 (2). For purposes of the present report, this can be assumed, as the application of the rule results in a stricter protection of the employee's rights than required by Article 6 GDPR (since data processing can only be justified based on necessity and not, for instance, on the employee's consent) and all other protective provisions of the GDPR remain applicable. The Hanover Administrative Court expressly notes that the balancing of interests approach which German case law uses to assess compliance with Section 26 BDSG seems equivalent to the requirements of Article 6 (1) f GDPR – meaning that a finding of compliance with the BDSG implies a fortiori compliance with the GDPR.

3.2. Transparency of algorithmic data processing

With the notable exception of Amazon's system of algorithmic management in its German warehouse – which all adjudicating bodies and stakeholders involved characterised as transparent and in compliance with Articles 12–13 GDPR – all data controllers at issue in the cases on algorithmic management across Europe so far were found to have violated their information obligations (or are at least accused of it, in those cases that are still pending).

In this context, particularly the data controller's obligation to inform the data subject about automated decision-making in accordance with Article 13 (2) (f), Article 14 (2) (g), and Article 15 (1) (h) GDPR is of relevance. The former two provisions require the provision of information in advance when the data is obtained, the latter give the data subject the right to obtain information on request. As far as the conditions for access rights under these provisions, as discussed in the following subsections, are not fulfilled, one might argue that at least the working of those algorithms which concern mandatory elements of information under Article 4 of the Transparent and Predictable Working Conditions Directive 2019/1152 (TPWC Directive) would need to be explained to workers.

3.2.1. Elements of information

In order for a worker to have a clear idea about the algorithmic management to which they are subject, three elements of information are relevant:

- information about the existence of automated decision-making and/or profiling;
- information about the personal data used for such decision-making and/or profiling; and
- information about the logic involved, the significance and the envisaged consequences for the worker.

Regarding the second element, it is clear that a data controller in the sense of the GDPR must inform the data subject about all categories of personal data that it processes, and the purposes for which that happens (see notably Article 14 (1) (c-d) and 15 (1) (a-b)). This, however, does not mean that an employer/principal must make transparent which, if any, among a possibly very large number of data categories are used for algorithmic processing.

As regards the first and third element, the formulation of Articles 13 (2) (f), 14 (2) (g) and 15 (1) (h) GDPR[40] poses fundamental difficulties of interpretation. Notably, the phrase "at least in those cases" indicates that the scope of cases in which information about the *existence* of automated decision-

[40] "[…] the existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject".

making and/or profiling is required is wider than that in which additional information has to be furnished regarding the algorithm's *logic and consequences*.

The interpretation implied by the Dutch language version of the text[41] (as noted by the Amsterdam Appeals Court) and arguably also Recital 63 of the preamble to the GDPR[42] is a differentiation between decision-making and profiling, to the effect that information rights about the logic, significance and consequences are restricted to those forms of algorithmic management which include profiling. The Amsterdam Appeals Court noted that what is concretely implied by the Dutch text – namely that the right to information about the existence of automated processing is very broad, potentially including even just partly automated processes which do not meet the "threshold of significance" of Article 22 (1) (see supra at 3.1.2), while the right to information about the logics etc. would be limited to cases of *profiling* which additionally fulfil all requirements of Article 22 – "cannot be correct".[43] The Court subsequently chose for an interpretation which makes no distinction between decision-making and profiling, and neither between rights to information about the existence on the one hand and about the logics etc. on the other, but generally requires algorithmic processes to fulfil the requirements of Article 22 (1) (i.e. to be solely based on automated processing and have legal or comparably significant consequences) in order to trigger a right to information under Article 15 (1) (h) GDPR. Consequently, the Court's rulings on Uber and Ola found that all information rights under that provision were applicable in relation to those algorithms which it had identified as solely automated and sufficiently significant as described supra at 3.1.1-2, whereas it considered any use of algorithms not meeting those conditions (such as those involved in Ola's Guardian system) entirely outside the scope of Article 15 (1) (h) GDPR.

A different interpretation, which seems implied by the overruled first-instance decision of the Amsterdam Civil Court (though this is not entirely clear from the text) is to assume that information about the *existence* of automated decision-making, including profiling, is required in all cases where these mechanisms are used, not only those falling under Article 22 GDPR, whereas the other rights mentioned in Article 15 (1) (h) (about logics, significance and consequences) are limited to cases of decision-making and/or profiling which concretely fulfil the conditions of Article 22 (1). This variant arguably retains some meaning for the phrase "at least in those cases" and obviously ensures the greatest degree of transparency in comparison to the other options.

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41 "[…] het bestaan van geautomatiseerde besluitvorming, *met inbegrip van de in artikel 22, leden 1 en 4, bedoelde profilering*, en, ten minste in die gevallen, nuttige informatie […]".

42 "[…] communication […] with regard to […] the logic involved in any automatic personal data processing and, *at least when based on profiling*, the consequences of such processing." Note that this formulation actually implies a differentiation between cases that require information about the *logic involved* and those requiring additional information about the *consequences* – in clear contradiction to the formulation in Articles 13-15, which always refers to these two elements together.

43 This is mainly due to the fact that the reference to Article 22 (4) does not fit for profiling. One might add that generally excluding not profiling-based automated decision-making from information rights about the algorithm's logics and consequences would contradict the system and purpose of Article 22, which puts those forms on the same level with profiling and subjects them to a prohibition in principle.

Again, the Guidelines of the Article 29 Working Party,[44] which are referred to by both courts, do not expressly address the question.

The Italian Data Protection Authority (as the only other body dealing with the respective provisions, specifically Article 13 (2) (f) GDPR) did not address potential differentiations at all, as it considered all forms of automated decision-making used by Glovo and Deliveroo to fall under Article 22, and the information which the platforms provided was so deficient that the Authority saw no need to go into details on possible nuances. In respect of Glovo, the information provided to riders had even inaccurately claimed that the platform "does not adopt decisions based on automated decision-making processes", that "all the parameters that are taken into consideration have been generated manually" and that "profiles are not created".

3.2.2. Contents of information

The Guidelines of the Article 29 Working Party[45] state that, in the cases of Articles 13 (2) (f), 14 (2) (g) and 15 (1) (h) GDPR, "[t]he controller should provide the data subject with general information (notably, on factors taken into account for the decision-making process, and on their respective 'weight' on an aggregate level) which is also useful for him or her to challenge the decision."

The Amsterdam Appeals Court, as the only body examining this point in detail when ruling on Uber and Ola, gave much weight to this stipulation of the Guidelines in its decision. It particularly emphasises the reference to the respective 'weight' of factors (which means that providing a list of all elements which somehow contribute to the algorithm's working is not sufficient) and the required usefulness for challenging the decision. Information must thus be provided in a form that actually allows a worker to understand which elements are or were decisive for the outcome of the automated decision and enables them to make an informed decision on whether to lodge a complaint.

The Court stressed that this interpretation was supported by the CJEU's decision in C-817/19 (Ligue des droits humains) and the AG's opinion in C-634/21 (SCHUFA).

3.2.3. Sufficient determination of a request for access

In case of requests under Article 15 GDPR, as they were at issue in the Netherlands, the Amsterdam Civil Court found the companies were not obliged to answer unspecified requests such as demands to provide all personal data processed by them, or all data belonging to very broadly defined categories.

44 Chapter III of the Guidelines (n. 33).

45 Ibid. 27.

It referred to Recital 63 of the preamble to the GDPR, which stipulates that controllers processing "a large quantity of information concerning the data subject" – which is clearly the case for platform companies – can require the data subject to "specify the information or processing activities to which the request relates".

While the second-instance Court expressly saw an "inaccurate interpretation" of Recital 63 in the lower-instance judgment, this statement apparently concerns (only) the fact that the overruled judgment relied on Recital 63 in relation to a situation where neither Uber nor Ola had actually requested a specification of the drivers' demand to access information. Much rather, they had simply provided incomplete information, after which the applicants had turned to the courts. In this situation, the Appeals Court saw no need to even analyse whether and to what degree the claimants would have been obliged to specify their requests upon the platforms' request. Rather, since the applicants had immediately brought a lawsuit instead of first notifying the platforms about the fact that the information was considered insufficient and giving it the opportunity for correction, their claim had to be rejected for procedural reasons.

As a result, the Appeals Court did not pronounce itself on the requirements, if any, of sufficient determination of a request to access information. This leaves an important question unanswered, as claimants may typically want to lodge information requests also in respect of possible aspects of data processing which they are not yet aware of, notably if the data controller has failed to provide complete information in advance in accordance with Articles 13-14 GDPR.

3.2.4. Exceptions

The GDPR knows a restricted number of exceptions to the principle of data transparency.

Since the Italian Data Protection Authority dealt solely with Article 13 GDPR (i.e. information about data collected from the data subject),[46] it did not assess any of the specific justifications as envisaged by Articles 14 (5) and 15 (4) GDPR. With regard to the exception stipulated in Article 13 (4) if "the data subject already has the information", the Authority rejected Glovo's view that riders had to be aware of automated decision-making due to information provided in the hiring process. Although a detailed analysis was not given, the Authority obviously did not consider this sufficient to justify the express denial of any automated decision-making in the official information document Glovo had provided to riders.

The Amsterdam Civil Court dealt with a defence relying on Article 15 (4) GDPR in all of the cases against Uber and Ola. In two of these cases, the Court noted in general that, with a view to Recitals

[46] Although, arguably, the Authority could have invoked Article 14 GDPR, considering that part of the data feeding into Glovo's algorithms was clearly not obtained from the data subject (cf. the aforementioned use of ratings from customers and restaurants).

60 and 63, the protection of interests under Article 15 (4) GDPR could also include the protection of intellectual property and copyright, which may justify the withholding of specific details about the algorithms involved. However, this was not explored more specifically in relation to any concrete case of information withheld, mainly because – as explained supra at 3.1.2 – the Court rejected a right to information about the algorithms' underlying logic in all cases except Ola's system for imposing deductions and sanctions.

By contrast, the Appeals Court – which ended up granting most of these claims – expressly discarded Article 15 (4) GDPR as a basis for denying information as such, as its wording only allows for restrictions to the right to obtain a copy, and accordingly could not relieve the platform from its duty to provide an explanation of its algorithmic management in line with Article 15 (1) (h) GDPR. Instead, legitimate interests of the data controller could be considered in the context of Article 23 (1) (i) GDPR, which permits necessary and proportionate measures that are necessary in a democratic society to safeguard i.a. the right and freedoms of others. However, the Court pointed to the consideration in Recital 63 of the preamble to the GDPR that "the result of those considerations [of the freedoms of others, including trade secrets or intellectual property] should not be a refusal to provide all information to the data subject". It concluded that compliance with the minimum standards it identified for the contents of information (see supra at 3.2.2) was unconditional, while stressing that those standards did not require the provision of technical details on the algorithms involved.

Both courts in the Dutch proceedings also principally recognised the platforms' more specific interest in withholding information which could enable drivers to circumvent their fraud detection systems – notably with a view to platforms' obligation to maintain an effective fraud prevention mechanisms to fulfil licencing conditions (e.g. those of the aforementioned TfL in London). Again, the courts differed in regard to the legal basis considered relevant (Article 15 (4) vs. Article 23 (1) (c-d) and/or (h)). More importantly, the stakes were different: as the first-instance Court assumed the deregistration of Uber drivers to be ultimately a human decision, it only considered the platform obliged to reveal the personal data used in this decision. This made Uber's concerns appear clearly insufficient to outweigh former drivers' important interest in obtaining at least this information. As opposed to this, the second-instance decision classified the decision as fully automated and thus triggering a supplementary explanation obligation under Article 15 (1) (h) GDPR. Although this comes much closer to obliging Uber to reveal aspects of auto-detection which rely on secrecy in order to function, the Court reiterated with a view to Recital 63 that any justified limitation of detail could not undercut the minimum standards identified supra at 3.2.2.

Though not immediately related to algorithmic management, a more detailed assessment of Article 15 (4) GDPR was given by the Dutch courts (which fully agree on this point) in relation to the privacy rights of passengers. They ruled with regard to ratings that the imperative protection of passengers' anonymity could not justify the limitation of drivers' insight to the average number of stars they

received. It did, however, justify the denial of identifiability of the specific ride (e.g. by reference to start and end location) to which a particular rating related. Accordingly, Uber and Ola had to provide the drivers with the full wording of the ratings that concerned them, while ensuring that those could not be attributed to individual customers.

With a view to those findings in the rulings, it remains to be seen whether references to customer privacy emerge as a major obstacle in the implementation of the Amsterdam Appeals Court's ruling on Uber (which obliged the platform to explain the logic involved in its algorithmic deregistration system), considering that complaints lodged in France as mentioned above have identified references to customer complaints as the primary "exemplary" reason indicated by Uber in its deregistration messages to the drivers concerned.

3.2.5. Additional requirements under national law

Also regarding information requirements, national regulation in the sense of Article 88 GDPR may contain more specific rules than those contained in Articles 13-15 GDPR.

The difference that the existence of tailor-made regulation for the employment context can make for the predictability and success of information requests may be illustrated by comparing of the Amsterdam Appeals Court's judgments of early April 2023 to the ruling of the Palermo Civil Court on a very similar request for information against a platform company just several days earlier. In stark contrast to the tedious examination of the various aspects of a typical algorithmic management system in the platform economy under Articles 13-15 in connection with 22 GDPR, as it needed to be conducted by the Dutch Court, the Palermo Court could rely on Article 1 bis of Legislative Decree 152/1997 when ruling on Uber Eats. This Article, which was inserted at the occasion of the Italian implementation of the TPWC Directive, contains an enumeration of aspects to communicate in case of algorithmic management in the employment context, which includes essentially all elements that are of interest to workers.[47] It is not limited by a threshold of significance comparable to that of Article 22 (1) GDPR.

In these circumstances, the Palermo Court's task was essentially limited to referring to the clear language of the Italian national provisions in order to define the information obligations it ordered Uber Eats to comply with. The GDPR was not even mentioned in the ruling.

The question remains whether, as alluded to above, the TPWC Directive itself might require an employer to actively inform workers about the existence and logics of at least those algorithms which

[47] More specifically, the aspects of the employment relationship affected by the use of algorithmic management; the purposes, logic and functioning of the systems used; the categories of data and the main parameters used to program or train the systems, including performance evaluation mechanisms; control measures and correction processes; the level of accuracy, robustness and cybersecurity, including the metrics used to measure these parameters; potentially discriminatory impacts of the metrics; and the person in charge of the system.

concern mandatory elements of information under Article 4 of the Directive. This might potentially constitute an alternative route to information rights that may be limited under the GDPR – at least for those workers which fall under the Directive's personal scope.

4. Conclusions

The scarce case law on algorithmic management existing so far evidences the key relevance of European law, but also the limitations and uncertainties which workers – and most notably platform workers – face when aiming to assert their rights in the context of algorithmic management.

This starts with the question which decisions are to be characterised as fully automated. The cases described above evidence that notably dismissal decisions, which obviously affect core interests of workers, may be taken by a human, but based on algorithmic conclusions in a variety of ways – such as a facial recognition software's finding of illicit account sharing by the worker (cf. pending cases against Uber and Ola in the UK), the weighing of selection criteria in a collective redundancy (case against TAP in Portugal) or an algorithmically calculated score in a performance evaluation (cf. settled case against Estée Lauder). Very recently, one of the Amsterdam Appeals Court's decisions on Uber has become the first to seriously assess the question of how to delimitate fully automated decisions, thereby corroborating the relevance of the Article 29 Working Party's Guidelines and revealing an avenue to dealing with poorly substantiated claims of meaningful human involvement. However, it should be noted that that Court's classification of Uber's deregistration system as fully automated was dependent on an allocation of the burden of proof which may not necessarily be considered implied by the GDPR, so that claimants in other jurisdictions may find it difficult to proof the absence of serious human involvement.

This issue of proof standards is just one of the difficulties workers face when asserting their rights under Article 15 GDPR. The Italian Data Protection Authority's investigations on Glovo and Deliveroo illustrate the immense quantity of data which platform companies process on their workers (cf. e.g. the storage of geolocation information recorded every 12 or 15 seconds, respectively, and the storage of some data up to four or even years after the termination of the contract, partly even indefinitely). In the eyes of the Amsterdam Civil Court, the sheer amount of data implies the need for claimants to specify requests for information with a view to Recital 63 of the preamble to the GDPR, as held in relation to Uber and Ola. At the same time, notably the Italian Authority's findings on Glovo also exemplify that the information provided by these companies on the basis of Article 13 (and 14) GDPR may be grossly incomplete or inaccurate, notably with regard to the use of algorithms. In this case, workers have little to go on when asked to specify a request under Article 15 GDPR. This raises the question whether Recital 63 should actually be understood as requiring the protection of the interest

of a data controller not to be burdened with the provision of access to the large amount of data it has amassed in respect of an individual, at the risk of undermining core mechanisms to ensure compliance with the GDPR.

The case of Uber's fraud detection systems is also illustrative in this regard. The company effectively needed to explain this system and the degree to which an algorithm was involved only in a case where the claimants' accounts had already been deactivated, so they could base their suspicion of automated decision-making on a concrete lack of explanation of that decision. By contrast, in a parallel case ruled on the same day by the same Court, respectively (both in first and in second instance), the claimants were denied any explanation, as they had not (yet) been affected by it and could only refer to the experiences of their colleagues.

Finally, the two probably most fundamental legal uncertainties revealed by the case law so far concern the scope of Article 22 and the accessory transparency provisions in Articles 13-15 GDPR.

As concerns the first, not a single decision so far has contained a concrete analysis of the requirements of the exceptions allowed by Article 22 (2) GDPR (notably referring to the necessity of processing for a contract and/or explicit consent of the data subject), or the concrete measures required by Article 22 (3) GDPR in such a case. These questions seem all the more pressing in a situation where a substantial number of algorithms used by platform companies have now been declared by courts and administrative institutions to come under the scope of Article 22 (1) – including types for which meaningful human intervention is difficult to imagine (such as customer matching or pricing systems) – and would thus be prohibited in principle.

This difficulty of ensuring the applicability of an exception under the rules of Article 22 (2-3) may also be a key motivation for restrictive approaches to Article 22 (1) GDPR, which seek to exempt algorithmic systems by setting the "threshold of significance" at a rather high level – such as notably the findings of the Amsterdam Civil Court, and arguably also the parts of the Article 29 Working Party's Guidelines to which they refer. They illustrate a concern that laying the bar too low might lead to difficulties in the context of platform-based work, where algorithmic decision-making is a constant feature, so that measures required by Article 22 (3) GDPR (notably the right to human oversight) may seem impracticable. At the same time, the algorithms excluded by the Amsterdam Civil Court include mechanisms with important effects for drivers' work and income opportunities, which prompted the second-instance judgment to fundamentally reassess the threshold of significance in favour of the applicants. Arguably, this decision – which seems crucial to avoid that workers are kept in the dark about core determinants of their income and opportunities – moves the question marks back to Article 22 (2-3), as a straight-out prohibition of matching and pricing algorithms would hardly be in the workers' interest.

Second, the interpretation problems resulting from the enigmatic formulation of the specific transparency requirements for automated processing in Articles 13-15 (aggravated by deviations among

the language versions and in the preamble) have been set out in some detail above. The interpretation chosen by the Amsterdam Appeals Court as the highest-level body assessing the question so far comes down to a single dividing line between those algorithms which come under both Article 22 and the related transparency provisions (Articles 13 (2) (f), 14 (2) (g), and 15 (1) (h) GDPR). While this interpretation ensures that the right to information is at least not narrower than the scope of the prohibition of Article 22, it ultimately means that the data controller is entitled, when fulfilling its information obligations under Articles 13-15, to not even mention the existence of any of those algorithms which it considers to fall outside the scope of Article 22 (1), notably with a view to the threshold of significance and/or human involvement – both of which are subject to the uncertainties as described. This may make it difficult to identify cases in which an employer departs from an excessively generous understanding of these options of avoiding Article 22 (1).

More generally, the cases decided so far indicate that, in the employment context, information and transparency are key, much more so than prohibitions or mandatory human intervention, which may even be against employees' interests if applied in an undifferentiated way. Most strikingly, while Amazon has faced strikes and protests by its warehouse workers in Germany over those algorithms which are experienced as non-transparent,[48] workers' representatives actually appeared to support the employer's position in the case before the Hanover Court. The testimonies as quoted in the judgment, which were key for the Court's balancing of interests, indicate workers' preference for an "objective", transparently working algorithmic mechanism over human surveillance and decision-making by the managerial personnel. It may also be noted that the clear majority of the complaints and lawsuits brought by workers (rather than Data Protection Agencies ex officio) so far have not asked for algorithmic management to be declared unlawful under Article 22 (1). Remarkably, even the claim in the Dutch case which exclusively concerned Uber's system of deregistering drivers (and thus did not include any of those algorithms which workers are reasonably interested in keeping in place) was formulated as a request for information, not a request to have automated processing declared illegal. This may illustrate that even trade unions and NGOs – who are regularly behind claims brought by workers – are not necessarily persuaded that human decision-making would improve the conditions of their constituents, so that the primary goal for the time being is rather to ensure that algorithms are transparent and make predictable decisions.

The example of recently adopted provisions in Italy, which were relied on for the first time in the judgment of the Palermo Civil Court, demonstrates the ease with which information rights may be extended to cover essentially all aspects of algorithmic management in the workplace, if the provisions are decoupled from the question whether the use of these algorithms is legal in principle. This cases also raises the intriguing question whether Article 4 of the TPWC might be relied on as an alternative when information rights cannot be based on the GDPR.

48 See Following EU data request, Amazon workers strike over transparency issues. *UNI Global Union* of 3/5/2022.

Further insights into the assessment of many of the questions addressed here may soon be available in the context of pending cases as referred to above. With a view to the most recent decisions in Italy and the Netherlands, one may also expect the implementation of those decisions – which comes down to giving unions far-reaching insight into the algorithmic decision-making used by platforms – to be instrumental in follow-up evaluations of the legitimacy of these systems. Notably, only a concrete understanding of the factors behind algorithmic decision-making will enable workers and their representatives to contemplate whether those may imply any discriminatory effects. As mentioned, such effects have so far been assessed – and confirmed – only in a single decision, handed down in 2020 by the Bologna Civil Court. That decision certainly also illustrates the importance of procedural rules developed in EU equal treatment law, such as claims brought by interested organisation and the reversal of the burden of proof. Although the concrete algorithmic setup examined in that case no longer exists (as Deliveroo in the meantime comprehensively implemented a "free login" system without shift reservations), similar systems are still operated by many platforms, as exemplified by Glovo's "System of excellence" as examined in 2021 by the Italian data protection authority. Moreover, algorithms attaching consequences other than priority for shift reservation to criteria of performance, reliability and availability appear to be widely used by platform companies – which may, depending on the precise criteria used, result in (indirect) discrimination based on disability, gender, parental or carer's responsibilities, or workers' representative status – all of which are relevant under various EU equal treatment directives.[49] The ongoing claim regarding decisions based on facial recognition software before the East London Employment Tribunal is specifically related to provisions of the Race Discrimination Directive 2000/43/EC.

All in all, the case law as summed up and analysed in this article evidences that the status quo of regulation in the EU offers important avenues to ensure the transparency and scrutiny of algorithmic management, but also that these are riddled with legal uncertainties. Needless to say, the latter might be alleviated significantly if Articles 6-8 of the proposed Platform Work Directive[50] are adopted as proposed, and much more so if arguments in favour of applying these rules also beyond the platform economy[51] are heeded in the final text. In the meantime, there are ways to deal with the deficiencies of EU law de lege lata – which includes both ambitious legislative steps at national level (as in Italy) and the purposive interpretation of the existent legal framework by courts and data protection authorities across countries.

49 See Directives 2006/54/EC, 2010/18/EU, 2019/1158/EU, 2000/78/EC and 2002/14/EC.

50 Proposal for a Directive on improving working conditions in platform work, COM/2021/762 final.

51 See European Parliament: Report on the proposal for a directive of the European Parliament and of the Council on improving working conditions in platform work, 21.12.2022 – (COM(2021)0762 – C9-0454/2021 – 2021/0414(COD)).

Annex

Table 1: judicial and administrative decisions on algorithmic management

(See section 2 for more information, including settled and ongoing cases)

Date	Court/ admin. body	Company	Main issue	Provisions of EU law affected	Consequences	Instance	Appeal	Case No./ link
				Germany				
28/10/2020	Landesbeauftragte für den Datenschutz (LfD) Niedersachsen [Lower Saxony State Data Protection Commissioner]	Amazon	violation of national law	Article 5 (1) (a-c) and (e) and (2); Article 6 (1) and (4); Articles 12-13; Article 22 (1); Article 88 (1) GDPR	prohibition of constant data collection	1st	overruled by the Administrative Court on 9/2/2023	non-published decision
9/02/2023	Verwaltungsgericht (VG) Hannover [Hanover Administrative Court]	Amazon	violation of national law	Article 5 (1) (a-c) and (e) and (2); Article 6 (1) and (4); Articles 12-13; Article 22 (1); Article 88 (1) GDPR	invalidation of prohibition	2nd	(not final; appeal by Data Protection Commissioner under consideration)	10 A 6199/20
				Italy				
31/12/2020	Tribunale di Bologna [Bologna Civil Court]	Deliveroo	discrimination	Article 2 (2) lit. b of Directive 2000/78/EC (discrimination based on belief)	compensation to be paid to the claimant trade union association	1st	-	RG n. 2949/2019
10/6/2021	Garante per la protezione dei dati personali [Data Protection Authority]	Glovo	GDPR violations, discrimination	Article 5 (1) lit. a), c) and e); Article 13; Article 22 (3); Article 25; Article 30 (1) lit. a), b), c), f) and g); Article 32; Article 35; Article 37 (7); and Article 88 GDPR	imposition of a fine; duty to change algorithms within 60 days / 90 days	1st	-	9675440
22/07/2021	Garante per la protezione dei dati personali [Data Protection Authority]	Deliveroo	GDPR violations, discrimination	Article 5 (1) lit. a), c) and e); Article 13; Article 22 (3); Article 25; Article 30 (1) lit. c), f) and g); Article 32; Article 35; Article 37 (7); and Article 88 GDPR. In other words, the only difference with regard to the Glovo ruling is the lack of an established violation of Article 30 (1) lit. a) and b) GDPR	imposition of a fine; duty to change algorithms within 90 days	1st	-	9685994
31/03/2023	Tribunale di Palermo [Palermo Civil Court]	Uber Eats	violation of national law	Article 2 (2) lit. b of Directive 2000/78/EC (discrimination based on belief)	duty to provide information on algorithmic management to claimant trade union	1st	-	RG n. 645/2023

Luxembourg								
22/12/2021	Commission nationale pour la protection des données [National Commission for Data Protection]	Amazon	GDPR violations	Article 22 (1) GDPR	-	1st	- (case pending)	C-053
Netherlands								
24/2/2021	Rechtbank Amsterdam [Amsterdam Civil Court]	Uber	GDPR violations	Article 22 (1) GDPR	duty to reinstate drivers whose account had been deactivated	1st	-	C/13/696010 / HA ZA 21-81
11/3/2021	Rechtbank Amsterdam [Amsterdam Civil Court]	Uber	GDPR violations	Article 15 (1) GDPR, including Article 15 (1) lit. h GDPR	duty to provide information on individual ratings relating to a driver	1st	overruled by the Appeals Court on 4/4/2023	C/13/687315 / HA RK 20-207
11/3/2021	Rechtbank Amsterdam [Amsterdam Civil Court]	Ola	GDPR violations	Article 15 (1) GDPR, including Article 15 (1) lit. h GDPR	duty to provide information on individual ratings relating to a driver and data used for the determination of the Fraud probability score, Earnings profile, and "Guardian" system; further information on the logic and significance of the algorithm determining the imposition of deductions and penalties	1st	overruled by the Appeals Court on 4/4/2024	C/13/689705 / HA RK 20-258
11/3/2021	Rechtbank Amsterdam [Amsterdam Civil Court]	Uber	GDPR violations	Article 15 (1) GDPR, including Article 15 (1) lit. h GDPR	duty to provide information on the reasons for the deactivation of drivers' accounts	1st	overruled by the Appeals Court on 4/4/2025	C/13/692003 / HA RK 20-302
4/04/2023	Gerechtshof Amsterdam [Amsterdam Appeals Court]	Uber	GDPR violations	Article 15 (1) GDPR, including Article 15 (1) lit. h GDPR	duty to provide supplementary information on processed personal data in the categories "Driver detailed device data", "Driver's profile", "tags", and "upfront pricing"; information in the sense of Article 15 (1) h on batched matching and upfront pricing systems, and the establishment of average ratings as a basis for deactivation; and to identify addressees and reasons of data sharing based on "legal reasons or in the event of a dispute"	2nd	(not final; appeal still possible)	200.295.747/01

4/04/2023	Gerechtshof Amsterdam [Amsterdam Appeals Court]	Ola	GDPR violations	Article 15 (1) GDPR, including Article 15 (1) lit. h GDPR	duty to provide supplementary information on processed personal data which the lower-instance Court had exempted due to purely internal use or insufficient specification of the request; information in the sense of Article 15 (1) h on all algorithms except those used in the Guardian system	2nd	(not final; appeal still possible)	200.295.806/01
4/04/2023	Gerechtshof Amsterdam [Amsterdam Appeals Court]	Uber	GDPR violations	Article 15 (1) GDPR, including Article 15 (1) lit. h GDPR	duty to provide information information in the sense of Article 15 (1) h on automated deactivation of drivers' accounts	2nd	(not final; appeal still possible)	200.295.742/01
Portugal								
12/09/2021	Juízo do Trabalho de Loures [Loures Labour Court]	TAP	violation of national law	-	-	1st (injunction)	overruled by the Appeals Court on 9/4/2022	non-published decision
9/04/2022	Tribunal da Relação de Lisboa [Lisbon Appeals Court]	TAP	violation of national law	-	injunction granted; suspension of dismissal for seven workers	1st (injunction)	(pending decision on merits)	non-published decision
UK								
12/4/2021	City of London Magistrates Court	Uber	withdrawal of private hire licence by Transport for London (TfL) as a consequence of a driver's deactivation by Uber	-	duty to reinstate the private hire license	2nd	-	-
27/7/2022	East London Employment Tribunal	UberEats	GDPR violations and discrimination based on race	Article 22 (1) GDPR	admissibility of claim	1st	-	3206212/2021