

# Private Regulation and Public Trust: Why Increased Transparency Could Strengthen the Fight against Doping

*Private Regulierung und öffentliches Vertrauen.*

*Warum vermehrte Transparenz den Kampf gegen Doping stärken könnte*

## Summary

- › **The fight against doping** depends largely on private regulation but needs public trust to be sustainable in the long term.
- › **The paper** discusses the implications of this realisation to make the case that increased transparency could strengthen the fight against doping. Because the World Anti-Doping Code (WADC) is a legally non-binding text from a non-governmental organisation (NGO), the standard of proof, known from criminal courts, and the usual evidence requirements applicable in parliamentary legislative procedures are not mandatory.
- › **In this situation**, increasing transparency could help tackle the epistemological challenges of the fight against doping, which is currently very complex, to protect the rights of accused athletes and ultimately to restore public trust.
- › **Drawing on recent policy debates** and recent case law, the paper argues that a voluntary departure from some of the current principles of anti-doping governance could make anti-doping more sustainable in the long term. The system (not athletes) should demonstrate that it has the ability to handle cases fairly.
- › **The increasing involvement** of public authorities in anti-doping and the quasi-penal nature of the sanctions system make it natural to move closer to the normative framework of the public sector.

## KEY WORDS:

Anti-Doping Fight, Anti-Doping Policy, Evidence-Based Policy, Evidence of Doping, Presumption of Innocence

## Zusammenfassung

- › **Der Anti-Doping-Kampf** basiert weitgehend auf privater Regulierung, bedarf aber öffentlichen Vertrauens.
- › **Der Beitrag** setzt sich mit den Implikationen dieser Feststellung auseinander um dafür zu plädieren, dass vermehrte Transparenz den Anti-Doping-Kampf stärken könnte. Da der World Anti-Doping Code (WADC) der rechtlich unverbindliche Text einer Nichtregierungsorganisation (NRO) ist, finden weder strafrechtliche Normen der Beweisführung, noch die üblichen Begründungsanforderungen in parlamentarischen Gesetzgebungsverfahren zwingend Anwendung.
- › **Vor diesem Hintergrund** könnte vermehrte Transparenz dazu helfen, epistemologische Herausforderungen des gegenwärtig sehr komplexen Anti-Doping-Kampfes zu lösen, die Rechte angeklagter Athleten zu schützen sowie öffentliches Vertrauen wiederherzustellen.
- › **Aufgrund jüngster Politikdebatten** sowie Anti-Doping-Verfahren wird dafür argumentiert, dass eine freiwillige Abweichung von einigen gegenwärtig maßgebenden Prinzipien der Anti-Doping-Governance den Anti-Doping-Kampf zukunftsfähiger machen könnte. Das System (nicht die Athleten) sollte seine Fähigkeit, Verfahren fair zu führen, glaubhaft machen.
- › **Aufgrund der zunehmenden Beteiligung** öffentlicher Behörden an Anti-Doping sowie des quasi-strafrechtlichen Charakters der Sanktionen erscheint eine Annäherung an öffentlich-rechtliche Normen naheliegend.

## SCHLÜSSELWÖRTER:

Anti-Doping-Kampf, Anti-Doping-Politik, Evidenzbasierung, Dopingnachweis, Unschuldsvermutung

## Introduction

One of the peculiarities of the worldwide fight against doping is its character of private regulation: even if worldwide standards are incorporated into national or regional state law in some jurisdictions, the basic rules against which such domestic measures are benchmarked (including for the purpose of compliance monitoring) are a prime example of private regulation. As the World Anti-Doping Agency (WADA) is an NGO, its World Anti-Doping Code (WADC) (48) has no legal value. As such, there is a specific need to earn and retain public trust, while on the other hand private organisations (whether commercial undertakings or charities) are increasingly under pressure to demonstrate good gover-

nance, including in sport. However the quasi-penal nature of this system has been affirmed in CJEU / Court of Justice of the European Union) case-law, in *Meca Medina*: 'It must be acknowledged that the penal nature of the anti-doping rules at issue and the magnitude of the penalties applicable if they are breached are capable of producing adverse effects on competition because they could, if penalties were ultimately to prove unjustified, result in an athlete's unwarranted exclusion from sporting events, and thus in impairment of the conditions under which the activity at issue is engaged in. It follows that, in order not to be covered by the prohibition laid down in Article 81(1) EC, the restrictions thus imposed >

ACCEPTED: April 2015

PUBLISHED ONLINE: May 2015

DOI: 10.5960/dzsm.2015.179

Kornbeck J. Private Regulation and Public Trust: Why Increased Transparency Could Strengthen the Fight against Doping. Dtsch Z Sportmed. 2015; 66: 121-127.

1. OFFICE OF THE EUROPEAN DATA PROTECTION SUPERVISOR (EDPS), Brussels, Belgium (see disclaimer, p. 126)



QR-Code scannen und Artikel online lesen.

## KORRESPONDENZADRESSE:

Jacob Kornbeck  
30, av. François Folie  
1180 Uccle (Bruxelles), Belgium  
✉: jacob.kornbeck@edps.europa.eu

by those rules must be limited to what is necessary to ensure the proper conduct of competitive sport [...] (14). Against this backdrop, athletes (whether indicted or not) and the general public may legitimately expect the system to be evidence-based, fair and proportionate; the demonstration whereof would require transparency as to how rules are made, risks are evaluated, alternatives considered, etc. The paper will show that this cannot always be taken for granted under the current system and the argument will be developed that increased transparency could actually strengthen the fight as a means of building public trust, or of restoring it where it might have been lost.

### Focus on Transparency, not on Corruption

The basic submission of this contribution is that, as a matter of legitimacy and public trust, anti-doping governance as defined in the WADC and as practised under the auspices of WADA, would benefit from increased transparency regarding its decision-making process at various stages. The aim is not to discuss doping as a form of corruption. Whether this is so, depends on the perspective chosen. Doping certainly leads to a multitude of social practices which have a corrupting effect on sport as well as the surrounding society. It thrives on a culture of secrecy and involves illicit or illegal actions, fuelled by an illegal trade involving criminal networks using illegal means of payment, etc. Though doping substances are not always banned under narcotics laws, their trade takes on the same forms as narcotics trade yet with a more favourable ratio between risk and yield (37).

Across the European Union (EU), the penal response has been rather diverse (15,17,23,36,37,38,46). According to some estimates, this trade is believed to be even bigger than the worldwide heroin trade, yet these grave consequences for society do not make doping a case of corruption per se. Penal law specialists in Germany have argued that doping could be seen as a form of fraud which could warrant legislative action to penalise doping (3), as opposed to trade which is penalised in most European jurisdictions; the current German coalition government is committed to following this line (9) and has submitted a bill (7). Yet legal concerns are likely to be articulated, should a legislative proposal emerge, including on such grounds as proportionality. The purpose of this paper is not to enter into discussions of this sort but rather to argue in favour of more transparency in anti-doping governance with regards to three crucial aspects of current anti-doping programmes: the epistemological challenges of the fight against doping, the rights of accused athletes, and the need to restore public trust.

### The Case for Increasing Transparency

#### Increasing Transparency to Tackle the Epistemological Challenges of the Fight against Doping

The uninitiated may be surprised to find a section on this topic, but what exactly is doping? The public may be forgiven for believing that it always means the same. The World Anti-Doping Code, in its Article 2.1-2.10 (48), foresees sanctioning a range of eight different so-called anti-doping rule violations, including the detection of a banned substance or method via a laboratory analysis but also 'tampering' or missed 'whereabouts' filings (three failed cases of reporting 'whereabouts' to allow tracking for testing purposes). The absence of an unambiguous definition in the Code (it uses a circular one defining doping as the occurrence of anti-doping rule violations) makes doping emerge as a slightly abstract offence, which may have repercussions regarding athletes' perception of guilt and morality. The anti-doping

system thus has to face some epistemological challenges which can best be met through transparency.

The regime is further characterised by a 'strict liability principle,' making athletes liable for any substance (or metabolite or marker) found in their bodily sample: there is no requirement for intention or even guilt. This radical departure from the usual European values related to liability and sanctions may have been acceptable as long as anti-doping was mainly or exclusively the province of NGOs, yet today's European governments are heavily involved in the fight (even if agencies are often technically private). It may also have seemed acceptable under the condition that doping was about fairness (44), yet anti-doping rules are far more than the usual technical standards of sports: they carry sanctions and involve public shaming and blaming. Finally, strict liability may have been acceptable for as long as anti-doping was about finding an actual substance (or metabolite or marker), yet with the increased use of indirect evidence, this argument becomes flawed too. In the worst case, athletes may be held accountable for substances not taken and methods not used, on the basis of probabilistic arguments that they could have taken or used them, irrespective of their knowledge or intentions.

Anti-doping has become so complex that an open debate is needed: a debate about what doping really is or should be, and one which only transparency can enable. Without transparency, athletes and the public will be presented with the outcomes of new sanctions procedures based upon even more unusual rules, without even knowing that athletes have not been found guilty in any way comparable to how defendants are found guilty in criminal courts. The unusual standards of the system are very hard to explain to outsiders, potentially drawing suspicion upon whoever tries to. Given the massive media coverage, usually held in simplistic black-and-white language, interlocutors are likely not to believe such explanations. While the implications regarding the rights of the defendant will be discussed further below, the focus should be on the combined implications of strict liability and new methods and procedures: reinforced epistemological challenges.

While some researchers are invited to join anti-doping governance structures, independent researchers claim they can neither check the validity of decisions taken at the governance level, nor the methods used by WADA-accredited laboratories in their analytical work (6,20,18,21,24,30,34,35,42). Despite high standards in many laboratories, accreditation has a political aspect to it and the overwhelming predominance of European laboratories can be construed as biased. Indeed the withdrawal of accreditations may lead to tensions. Yet as the risk of so-called 'false positives' is real (39), the strict liability system carries the risk of judicial murders, i.e. of sanctioning innocent athletes who cannot prove their innocence. Such cases are documented. The use of indirect evidence such as an abnormal T/E (testosterone to epitestosterone) ratio (as in the *Slaney* case) (10), or unusual fluctuations in blood values collected via the Athlete Biological Passport (ABP) (as in *Pechstein*) (30,31) contribute to re-prompting the epistemological question what doping really is, or should be. As a rule, athletes are subject to strict liability contingent upon 'positive' results from analyses performed by accredited laboratories. Apart from the fact that it may increasingly be inferred by other means, 'false positives,' though fortunately infrequent, are a possible and even plausible (39): high-profile cases (e.g. *Taurasi*) highlight the need to maintain appropriate safeguards lest innocent athletes be sanctioned. Yet 'non-analytical findings' have been hailed as the way forward: one former WADA Vice President and IOC (Internation-

al Olympic Committee) member even suggested using them in connection with bans under penal law (28). According to the CEO of one agency, such methods were eschewed in previous years rather on pragmatic grounds (51).

While the rules of the Code cannot be called unambiguous (see above), the heuristic aspects of testing and analysis have been the targets of some criticism as well. US biostatistician Berry, backed by the editors of the well-known science journal *Nature*, targeted the relevant protocols, arguing that they impose closed systems which do not allow for an unbiased validation of the test results (6). Berry was vindicated by the editors of *Nature* (34), criticising the system for departing from established standards of scientific objectivity and thereby accepting the sanctioning of innocent people: ‘*Nature* believes that accepting “legal limits” of specific metabolites without such rigorous verification goes against the foundational standards of modern science, and results in an arbitrary test for which the rate of false positives and false negatives can never be known. By leaving these rates unknown, and by not publishing and opening to broader scientific scrutiny the methods by which testing labs engage in study, it is *Nature*’s view that the anti-doping authorities have fostered a sporting culture of suspicion, secrecy and fear’ (34). ‘Detecting cheats is meant to promote fairness, but drug testing should not be exempt from the scientific principles and standards that apply to other biomedical sciences, such as disease diagnostics. The alternative could see the innocent being punished while the guilty escape on the grounds of reasonable doubt.’ (34).

According to these arguments, bias is imposed upon accredited laboratories and this limits their scientific objectivity. The alternative would be to apply the usual standards of scientific rigour, which have stood the test of time. Recently, Fischer & Berry published research reiterating the call for using normal scientific methods (18). Colleagues may disagree with Fischer & Berry: indeed Ljungquist, Horta & Wadler did (29). Yet athletes and the public deserve to be kept in the loop: in the face of such criticism, voiced by a respected researcher and backed by *Nature*, it is up to the anti-doping system to prove that it does not let athletes down.

The system (not athletes) should demonstrate that it has the ability to handle cases fairly. Whether suspicions of bias are justified or not, the answer to potential embarrassment is not isolation but transparency. Explicit rejection of established scientific standards could nurture conspiracy theories and failure to address the criticism would also not serve WADA and the laboratories very well. The purpose of raising this issue here is not to take sides between Berry, on the one hand, and Ljungquist, Horta & Wadler on the other, but rather to underscore the fact that the scientific community is not unanimous on these matters. While there may be good reasons for rebutting an article published in *Nature*, the existence of such an article is significant in itself on account of the journal’s status as a globally respected and trusted journal. While the dissenting article was published by *Nature* as well, athletes and the general public deserve to know that the scientific community is, or has been, divided over the issue. In case of doubt, indicted athletes deserve the benefit of doubt, at least according to the Western tradition of justice and fairness.

Because anti-doping rules carry heavy sanctions, athletes and the public should feel confident that they are fair and that every possible effort is being made to avoid convicting the innocent. It is bad enough that inadvertent yet objectively correct cases can be adjudicated. The trend towards non-analytical and indirect evidence calls for a broad debate which will only make

sense against the backdrop of transparency. Current discussions related to the use of ‘big data’ in other fields have seen proponents claim ‘the end of theory’ and the end of the scientific method (2). Big data sets are empirical in nature and need interpretation, not mere treatment in prefabricated computer programmes. Humans need to stay in control lest they overrate the power of their own tools; or else the tools may be more powerful than their creators’ judgment. (As an aside, East Germany’s famous secret police (Stasi) did not predict the sudden erosion of public authority and rapid transition to ‘people power’ in 1989, despite possessing comprehensive files on large swaths of the population. Arguably, they mainly used index cards, yet the point is another one: they could not interpret their empirical data.) However, the inconsistencies of the system are not merely academic. They have direct implications for athletes when under suspicion, and this is an additional reason to call for more transparency. These references to big data are not merely academic, as the sports world now shows a growing interest in how big data may be applied to its activities.

### Increasing Transparency to Protect the Rights of Accused Athletes

Given that the system exhibits a trend towards stricter rules and more comprehensive (potentially privacy-invasive) surveillance systems (1, 20), detailed justifications can be expected to be communicated in support of proposed amendments and new rules, especially when public authorities are expected to endorse them. Yet this does not happen. During the recent revision of the World Anti-Doping Code (2011-14) three out of four submissions made by the EU called for justifications and evidence supporting proposed changes (12,13), yet with only limited success. Several sources concur in deploring what they see as insufficient reporting and transparency; irrespective of whether these assessments can be sustained or not, they carry the potential for future conflicts. The system is moving towards an increased use of indirect evidence, yet the question is whether this is actually proof or just evidence of probability. Passing sanctions solely on the basis of indirect evidence such as ABP values appears disputable (4,5,30,31,35), ‘since indirect methods do not provide proof of doping but merely establish a very high probability that certain profiles must have emerged under unusual circumstances’ (35) (Translation: JK).

The Code itself makes it clear that it does not require the same standard of proof as in a criminal court: ‘The standard of proof shall be whether the Anti-Doping Organization has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation which is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt’ (Article 3.1) (48). This is upheld by the argument that anti-doping is about fairness and therefore uses procedural rules similar to those of a civil court (44). Yet this argument obscures the fact that the system is not just about fairness. While it is built around technical standards familiar to all those involved in sport (where they are legion, because sport cannot live without them), anti-doping rules are not mere technical standards. They carry sanctions and there is a practice consisting in communicating sanctions to the public using language reminiscent of criminal offences and penalties. This aggressive approach to media contacts can cost athletes their livelihood, even if they are later acquitted by sport’s own panels, as in the case of Danish cyclist Bo Hamburger who, in 2001, was dismissed by his national federation on ‘moral’ grounds in spite of having been acquitted under the relevant rules (47). ➤



The anti-doping regime is therefore a quasi-penal one and it seems surprising that its rules should not be enacted under conditions similar to the passing of bills in a national parliament. Yet this is precisely not the case.

The presumption of innocence has become a real source of concern for those equally committed to drug-free sport and to the individual rights of athletes, finding that 'today's anti-doping policy tends to reverse the 'innocent until proven guilty' rule, as presumption of innocence is replaced by suspicion of doping for any extraordinary athletic achievement' (24). In stark contrast herewith, some proponents have asserted that the introduction of the Athletes' Biological Passport (ABP) merely 'coincides with the paradigm shift that is materializing today in forensic identification science, from archaic assumptions of absolute certainty and perfection to a more defensible empirical and probabilistic foundation' (43). In the EU, the European Commission has previously highlighted the need for anti-doping rules to respect the presumption of innocence and called for all exceptions from the usual civil liberties to be provided for by law (17), while Members of the European Parliament have confirmed this concern (4,5). A good illustration of these trends is the recent CAS case *International Skating Union (ISU) v Pechstein* where an unusual blood value sufficed for a ban (30,31).

Data protection and privacy concerns have taken centre-stage since 2008 and produced a minor clash when the European data protection community started assessing the rules and procedures of the anti-doping community using the normal procedures and working methods. (50). In the EU, recent case law of the EU courts has made it clear that, although anti-doping rules fall under the autonomy of sports governing bodies, rules must be necessary and proportionate to reach a legitimate objective, as emphasised in EU case-law (14) and in legal scholarship (8).

The successful identification of a legitimate aim must lead to an affirmative necessity test and an affirmative proportionality test: mere pragmatic assertions of perceived usefulness will not suffice. Yet the necessity test and the proportionality test required are hampered by the absence of reliable data. One report, from a WADA working group, found that most anti-doping organisations (ADOs) did not even meet WADA's requirements regarding the publication of such data (49). WADA itself recognised that there is an issue related to the (in)effectiveness of the testing regime by setting up an expert group. This group, however, while acknowledging the flaws, concluded by calling for more power to be given to WADA. One national anti-doping organisation (NADO) issued a statement calling for more transparency and criticised the empirical base of the report. 'The report lists the insights and opinions of five highly knowledgeable people. But it lacks proper background information and scientific data to back up the conclusions and recommendations. The press release that made the report public (on May 21, 2013) mentions 'global anti-doping testing programs are not detecting the number of cheats that research otherwise shows is prevalent.' This other research, however, is very seldom shared. If these, and other data, would have been listed in the report, the recommendations would have been even stronger. We would like to ask WADA to share this sort of information openly in the future' (16).

Calls for more and better reporting are matched by denunciations of 'irrational laboratory testing figures' (42). A report from a trade union suggested the success ratio for in-competition (IC) tests might be 1:60, but for out-of-competition (OOC) 1:600, making IC testing ten times more efficient than OOC (36). Alternative figures have since then been proposed by

Simon as the result of additional research (prevalence of total rule violations: IC 0.76%; OOC 0.18%), suggesting IC testing 'only' be four times more efficient than OOC testing (42), and reporting practices have changed as a result of the polemic stirred by the first report (not necessarily in the sense that more figures are available now than then), yet the problem remains. OOC tests are a more recent addition to the test battery, and controversial on account of their privacy-invasive nature. They naturally require stronger evidence to justify them than IC tests do, yet such evidence may not be accessible. The absence of comprehensive data makes it difficult or impossible to assess the privacy-invasiveness of surveillance measures accompanying OOC testing and, more generally, necessity and proportionality. There is simply no alternative to increased transparency.

These problems may be seen as more concrete manifestations of the big data ideology discussed at the end of the previous section. This is not the only field where 'big data's predictive benefits belie an important insight historically represented in the presumption of innocence and associated privacy and due process values—namely, that there is wisdom in setting boundaries around the kinds of assumptions that can and cannot be made about people' (25).

### Increasing Transparency to Restore Public Trust

The world-wide anti-doping system described in this contribution may currently be undergoing a legitimacy crisis which neither it nor the noble endeavour of promoting drug-free sport would seem to deserve. Calls for a country's national sports governing bodies to sever ties with WADA may seem drastic, yet when the argument is based on a painstaking analysis of the lack of transparency and an inability to prove the effectiveness and deterrent effect of the system, purporting cartel-like structures in anti-doping governance, such calls cannot be dismissed as mere opportunism. Comparisons with Prohibition and the War against Drugs, both in the USA, should be unwelcome, as these experiments are today not unanimously appreciated as having served their purported purposes, while they certainly entailed draconian measures applied with a zeal and rigour quite unheard of in Western societies (1,41). Even if such criticisms can be objectively dismissed, wholly or in part, they can only be dealt with effectively through increased transparency.

Whereas it is normal, in legislative procedures applied by democratically elected parliaments and assemblies, to require detailed and evidence-based justifications to be submitted together with legislative proposals, this does not apply to proposals regarding amendments to the World Anti-Doping Code and International Standards, or to the introduction of new such texts. Indeed, as part of the last Code and IS review (2011-13), EU Governments specifically asked for detailed justifications (12,13) but remained rather unsuccessful in this regard. WADA's stakeholders (sports organisations and Governments) were thus asked to vote in favour of changes to the rules without having access to such documents as would be usually required in a parliamentary procedure. Since some proposals were of a controversial nature, and given that some Governments need the backing of their parliaments to transpose their international (legally non-binding) commitments into national law, this situation cannot be called ideal. The implication is that the same public authorities may later have to defend policies which they have introduced without being able to assess their likely impacts properly. This is of particular interest on account of an observable trend towards stricter rules and a tighter testing and surveillance regime (20).

Already the current sanctions regime might soon be reaching its limits whenever resourceful athletes ask for judicial review and redress, as can be seen e.g. from the trials accompanying the career of German skater Claudia Pechstein. Most recently, Pechstein received high-profile, high-visibility support from the German police trade union, the skater being a federal police sergeant. If current non-penal sanctions are difficult to uphold in court, it seems doubtful that a penal approach would find more sympathy with judges, as opposed to sport's own panels. Yet a powerful argument has also been made, with reference to the experience of Prohibition in the USA, that the ban is part of the problem, having triggered the very societal consequences which clearly qualify as corruption and which can be assumed to make many citizens unnecessarily accustomed to illicit and illegal individual and collective behaviour (41). This discussion cannot be considered as having come to a conclusive stage, and the ever-changing nature of the definitions and justifications used to underpin the anti-doping regime makes doping a rather more abstract offence than, say, homicide, house burglaries or tax evasion.

The criteria for including substances and methods on the Prohibited List show a flexibility which would be surprising in a penal context, with a concept called 'the spirit of sport' allowing for inclusion in the absence of a health-threat and with 'WADA's determination' permitting to dispense from the requirement for scientific evidence (26). In terms of public trust, anti-doping has a potential problem due to the fact that it is constantly following a moving target and keeps redefining its target, with a 'strict liability' regime of unconditional objective liability for any prohibited substance (or marker or metabolite thereof) found in an athletes' bodily sample having been supplemented by various forms of indirect evidence. Other unusual features add up to serious limitations in the rights of accused athletes, in a system which explicitly knows no *mens rea* and no *in dubio pro reo* requirements, all of which add up to make the system vulnerable to legal challenges which may be permissible and legitimate in liberal democracies ruled by the law.

Critics of the current regime are often easily depicted as undermining it. The report from the WADA Working Group refers, inter alia, to 'Active interference in the effectiveness of anti-doping activities (e.g., data protection issues continually raised by a small group of civil servants, designed to prevent effective worldwide activities)' (49). An independent research report records, inter alia: 'An extreme position was adopted by one WADA participant who considered academics falling under the label 'ethical experts' to be akin to intellectual terrorists' (32). Yet the CEO of one European anti-doping has argued that 'making anti-doping policies more democratic also makes them more effective' (40,50). In the long run, it may be better for anti-doping to come closer to the usual standards applicable in democratic societies ruled by the law, accustomed to pluralism and transparency and systematically relying on evidence-based decision making methods. Yet the Code and Standards are created and amended without such evidence. European governments called for it in vain as part of the revision of the 2009 Code (12,13). Athletes are only heard through athletes' commissions without their own resources, including WADA's own Athletes' Commission which is not elected but appointed by WADA. Independent trade unions funded by their members have no seat on WADA structures (27). One way of ensuring transparency is to share information not just with selected expert audiences but indeed with the general public. Another way is to enlarge the franchise regarding the representation of the people concerned. Despite the resemblance with conditions before the reform bills

for the UK parliament in the nineteenth century, this appears to be a rather normal situation in many sports governing bodies (19), yes it does not oblige governments to accept the status quo.

Critics will argue that sharing information is too dangerous as it plays crucial information into the hands of those who organise doping. Yet high-profile cases have shown that these networks are professional and well-informed already. When a container with human growth hormone disappears from the logistics facility of a pharmaceutical firm, this seems only possibly due to the presence of facilitating insiders: how would any outsider be able to locate and remove the right container? Under the circumstances, it cannot be taken for granted that the current culture of secrecy keeps crucial information away from those whose intentions are dishonourable. One thing is certain however: it bars it from honourable people, whose constructive input could help make anti-doping more legitimate and bring it more in line with what is perceived as 'necessary in a democratic society' (11) as required in the European Convention on Human Rights of the Council of Europe. Anti-doping must not be over-zealous, and the science behind it must limit its exposure to bias. Advising that, 'if ADOs are aggressively pursuing individuals, the science must be equally aggressive' (49), seems misguided. Anti-doping science must not be aggressive (not even in the North American acceptance of the word) but scientific, while individuals should be pursued justly, professionally and proportionately: certainly not aggressively, 'without anger and zealotry' or 'without bitterness and partiality,' as Tacitus put it 2,000 years ago (45); but proportionality necessitates transparency.

While some see increased transparency as a threat to the anti-doping regime, others may see it as its salvation. At least in liberal democracies accustomed to transparency, it may be the best way to build public trust, rather than asking the public (and athletes) to trust the system blindly. Decisions should be evidence-based. If an assessment of OOC testing were to show it being inefficient (see above), perhaps it is time to reconsider the policy and/or the modalities of implementation. Finally, WADA itself is a declared champion of transparency when it comes to the public disclosure of sanctions, which has some implications under European data protection law. Yet if transparency is good in this case, it should also be good in others.

## Conclusion

By examining some current issues linked to the epistemological challenges of the fight against doping, the rights of accused athletes, and the need to restore public trust, the contribution has made it plausible that increased transparency should be a goal for the future development of anti-doping governance. In the long run, it would not weaken the fight but rather strengthen it, at least in liberal democracies with the rule of law, as it would protect the anti-doping system from legal and other challenges. In such societies, the system should try as far as it can to converge with the usual standards of governance as well as proof and sanctions. Not all criticisms quoted in this chapter may be justified. Some may even be unfounded, yet it is up to the anti-doping system to address them by increasing transparency and by making its decisions more evidently evidence-based.

Transparency could be backed by additional measures, such as more direct mechanisms for athlete involvement. To begin with, the nature and magnitude of the phenomenon of doping needs to be better known and understood (15,22,33). >

Such measures are needed in a sector which emphasises its autonomy but expects support from governments. In liberal democracies with the rule of law, public authorities should increasingly ask themselves how many exceptions from the usual rules of the road they can accept while supporting the system financially, morally and otherwise. The concepts of necessity and proportionality need to become cornerstones of the system. This is about the legitimacy of decisions, and the need for external experts and the general public to be able to assess the appropriateness and proportionality of the means chosen. Even if the objectives are legitimate the means may not always be. In relation to privacy, only regular reporting from all ADOs will allow assessing the proportionality of the most privacy-invasive measures. Since OOC testing is far more controversial (and legally more disputable) than traditional IC testing, support for OOC tests needs to come from a demonstration that it is worth the sacrifices made. Finally, the financial obligations of governments need justifications, especially in times of crisis: there are many calls on the public purse. ■

## Conflict of Interest

*The author has no conflicts of interest*

## Disclaimer

The author is an official of the European Union yet opinions expressed are solely those of the author and do not render official EU positions. After working in the Sport Unit of the European Commission (as Policy Officer in charge of anti-doping, inter alia) (2001-14) the author recently joined the secretariat of the European Data Protection Supervisor (EDPS) as a Legal Officer.

## Acknowledgements

Thanks are owed to Brian Alexander (USA), Luis Horta (Brazil), Perikles Simon (Germany) and Steven Teitler (The Netherlands) for comments provided on earlier versions of the draft. Any remaining inaccuracies remain my sole responsibility. Not all of my ideas were backed by all four colleagues, yet all provided feedback which was vital to keeping the right focus and for which sincere thanks are owed. Thanks are also owed to the anonymous reviewers of this journal for their advice.

## References

- (1) **ALEXANDER B.** War on Drugs Redux: Welcome to the War on Doping in Sports. *Subst Use Misuse*. 2014;49(9):1190-1193. doi:10.3109/10826084.2014.904119.
- (2) **ANDERSON C.** The End of Theory: The Data Deluge Makes the Scientific Method Obsolete. *Wired*, 06.23.08, [http://archive.wired.com/science/discoveries/magazine/16-07/pb\\_theory](http://archive.wired.com/science/discoveries/magazine/16-07/pb_theory)
- (3) **BANNENBERG B, RÖSSNER D.** Straftat gegen den Wettbewerb. Plädoyer für den Einsatz des Strafrechts bei Dopingverstößen. In: Weinreich J. (ed): *Korruption im Sport*. Leipzig: Forum Verlag (2006), 214-227
- (4) **BELET I.** Blood passport as evidence of doping. E-007480/2013. 25 June 2013. *Official Journal of the European Union*, C 55E, 26.2.2014, 293-294
- (5) **BELET I.** Blood passport as evidence of doping. P-000937-14. 30 January 2014. *Official Journal of the European Union*, C 300, 5.9.2014, 247-248
- (6) **BERRY DA.** The Science of Doping. *Nature*. 2008;454(7205):692-693. doi:10.1038/454692a.
- (7) **BUNDESMINISTERIUM DER JUSTIZ UND FÜR VERBRAUCHERSCHUTZ, BUNDESMINISTERIUM DES INNERN, BUNDESMINISTERIUM FÜR GESUNDHEIT.** Entwurf eines Gesetzes zur Bekämpfung von Doping im Sport. Bearbeitungsstand: 10.11.2014 16:07 Uhr, [http://www.bmg.bund.de/fileadmin/dateien/Downloads/Gesetze\\_und\\_Verordnungen/Laufende\\_Verfahren/A/AntiDopG/141110\\_RefE\\_Gesetz\\_zur\\_Bekaempfung\\_von\\_Doping\\_im\\_Sport.pdf](http://www.bmg.bund.de/fileadmin/dateien/Downloads/Gesetze_und_Verordnungen/Laufende_Verfahren/A/AntiDopG/141110_RefE_Gesetz_zur_Bekaempfung_von_Doping_im_Sport.pdf)
- (8) **GALLERY C, MCARDLE D.** Doping, European law and the implications of Meca-Medina. *International Journal of Sport Policy and Politics*. 2011;3(2):163-175. doi:10.1080/19406940.2011.579146.
- (9) **CDU, CSU, SPD.** Deutschlands Zukunft gestalten. Koalitionsvertrag zwischen CDU, CSU und SPD. 18. Legislaturperiode. Rheinbach: Union Betriebs-GmbH (2013), <https://www.cdu.de/sites/default/files/media/dokumente/koalitionsvertrag.pdf>
- (10) **COLEMAN JE, LEVINE JM.** The burden of proof in endogenous substance cases: a masking agent for junk science. In: McNamee M, Möller V (eds): *Doping and Anti-Doping Policy in Sport: Ethical, Legal and Social Perspectives*. New York: Routledge (2011), 27-49
- (11) **COUNCIL OF EUROPE.** European Convention on Human Rights. Convention for the Protection of Human Rights and Fundamental Freedoms. Rome, 4.XI.1950, [http://www.echr.coe.int/Documents/Convention\\_ENG.pdf](http://www.echr.coe.int/Documents/Convention_ENG.pdf) (see Article 6 and 8-11)
- (12) **COUNCIL OF THE EUROPEAN UNION.** EU contribution to the revision of the World Anti-Doping Code. Brussels, 26 September 2012. 14204/12, (<http://register.consilium.europa.eu/pdf/en/12/st14/st14204.en12.pdf>)
- (13) **COUNCIL OF THE EUROPEAN UNION.** EU contribution to the revision of the World Anti-Doping Code and International Standards. Brussels, 12 July 2013. 12159/13, <http://register.consilium.europa.eu/pdf/en/13/st12/st12159.en13.pdf>
- (14) **COURT OF JUSTICE OF THE EUROPEAN UNION.** Case C-519/04 P. Judgment of the Court (Third Chamber) of 18 July 2006. David Meca-Medina and Igor Majcen v Commission of the European Communities. <http://curia.europa.eu/>
- (15) **BACKHOUSE S, COLLINS C, DEFOORT Y, MCNAMEE M, PARKINSON A, SAUER M.** Study on Doping Prevention: A map of Legal, Regulatory and Prevention Practice Provisions in EU 28. Luxembourg: Publications Office of the European Union (2014), [http://ec.europa.eu/sport/news/2014/docs/doping-prevention-report\\_en.pdf](http://ec.europa.eu/sport/news/2014/docs/doping-prevention-report_en.pdf)



- (16) **DOPINGAUTORITEIT**. Netherlands NADO reaction to report on "Lack of Effectiveness of Testing Programs", Capelle aan den IJssel, 19 July 2013. [http://inado.org/uploads/3/1/2/9/3129436/pound\\_report\\_dopingautoriteit\\_comments.pdf](http://inado.org/uploads/3/1/2/9/3129436/pound_report_dopingautoriteit_comments.pdf)
- (17) **EUROPEAN COMMISSION**. Communication: Developing the European Dimension in Sport. 18.1.2011, COM(2011) 12. Brussels: European Commission, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0012:FIN:en:PDF>
- (18) **FISCHER K, BERRY D**. Statisticians Introduce Science to International Doping Agency: The Andrus Veerpalu Case. *Chance: An Official Magazine of the American Statistical Association*, 27:3 (2014): 10-16. <http://chance.amstat.org/2014/09/doping/>
- (19) **GEERAERT A, ALM J, GROLL M**. Good governance in international sport organizations: an analysis of the 35 Olympic sport governing bodies. *International Journal of Sport Policy and Politics*. 2014;6(3):281-306. doi:10.1080/19406940.2013.825874.
- (20) **GLEAVES J**. A Critique of Contemporary Sanctions for Anti-Doping Violations: Changing Directions. In: McNamee M, Møller V (eds): *Doping and Anti-Doping Policy in Sport: Ethical, Legal and Social Perspectives*. New York: Routledge (2011): 233-245
- (21) **GROLEAU CS**. Weird Science: A Look at the World Anti-Doping Agency's Questionable Testing Methods and the Need for Change to Protect International Athletes. *Quinnipiac Health Law*. 2009;13(85):85-116.
- (22) **DE HON O, KUIPERS H, VAN BOTTENBURG M**. Prevalence of Doping Use in Elite Sports: A Review of Numbers and Methods. *Sports Med*. 2015;45:57-69. doi:10.1007/s40279-014-0247-x
- (23) **HOULIHAN B, GARCIA B**. The use of legislation in relation to controlling the production, movement, importation, distribution and supply of performance-enhancing drugs in sport (PEDS). Loughborough: Loughborough University, Institute of Sport and Leisure Policy (2012). <http://www.unesco.org/shs/sport/addbase/media/docs/doc-506aac23e2af9.pdf>
- (24) **KAYSER B**. On the presumption of guilt without proof and intentionality and other consequences of current anti-doping policy. In: McNamee M, Møller V (eds): *Doping and Anti-Doping Policy in Sport: Ethical, Legal and Social Perspectives*. New York: Routledge (2011): 84-99
- (25) **KERR I, EARLE J**. Prediction, Preemption, Presumption: How Big Data Threatens Big Picture Privacy. *Stanford Law Review Online*, 66:65 (2013): 65-72. <http://www.stanfordlawreview.org/online/privacy-and-big-data/prediction-preemption-presumption>
- (26) **KORNBECK J**. The Naked Spirit of Sport: a framework for revisiting the system of bans and justifications in the World Anti-Doping Code. *Sport, Ethics and Philosophy*. 2013;7(3):313-330. doi:10.1080/17511321.2013.831115
- (27) **KORNBECK J**. Olympic Heritage, Athletes' Trade Unions and Anti-Doping Governance. Vienna: Wiener Verlag für Sozialforschung (William Thompson Working Papers, NS 7) (2014). [http://wvifs.at/files/WT\\_WP-7\\_Kornbeck.pdf](http://wvifs.at/files/WT_WP-7_Kornbeck.pdf)
- (28) **LJUNGQVIST A**. Der Anti-Doping-Kampf als Aufgabe des IOC. In: Blumenthal W (ed): *Der Kampf gegen Doping. Die gesellschaftliche Verantwortung von Sport und Politik auf nationaler und internationaler Ebene*. Sankt Augustin: Konrad-Adenauer-Stiftung (2010). [http://www.kas.de/wf/doc/kas\\_20651-544-1-30.pdf?100929165220](http://www.kas.de/wf/doc/kas_20651-544-1-30.pdf?100929165220), pp. 18-35 (see p. 31)
- (29) **LJUNGQVIST A, HORTA L, WADLER G**. Doping: world agency sets standards to promote fair play. *Nature*. 2008;455(7217):1176. doi:10.1038/4551176a.
- (30) **MCARDLE D**. Longitudinal profiling, sports arbitration, and the woman who had nothing to lose: some thoughts on Pechstein v. the International Skating Union. In: McNamee M, Møller V (eds): *Doping and Anti-Doping Policy in Sport: Ethical, Legal and Social Perspectives*. New York: Routledge (2011), 50-65
- (31) **MCARDLE D**. CAS 2009/A/1912-1913 Pechstein vs International Skating Union. In: Anderson J. (ed): *Leading Cases in Sports Law*. Berlin et al.: Springer (2013), 209-225
- (32) **MCNAMEE MJ**. Ethics in Public Policy Making: The Case of Human Enhancement (EPOCH), Grant Number: SIS-CT-2010-266660. Epoch Final Report: Work Package 7 (Physical Enhancement). (2011). <http://www.swansea.ac.uk/media/The%20Case%20of%20Human%20Enhancement%20EPOCH%20Report.pdf>
- (33) **MOMAYA A, FAWAL M, ESTES R**. Performance-Enhancing Substances in Sports: A Review of the Literature. *Sports Med*. 2015;45:517-531. doi:10.1007/s40279-015-0308-9.
- (34) **NATURE**. Editorial: A level playing field? *Nature*, 454:7205 (2008): 667. doi:10.1038/454667a
- (35) **NEUBERGER E, SIMON P**. Auf der Suche nach geeigneten Nachweismethoden für Doping – das Transkriptom. *Dtsch Z Sportmed*. 2014;65(10):272-278. doi:10.5960/dzsm.2014.140
- (36) **PALMER W, TAYLOR S, WINGATE A**. Adverse Analyzing: A European Study of Anti Doping Organization Reporting Practices and the Efficacy of Drug Testing Athletes. Nyon, Switzerland: UNI Global Union (2011), [http://www.euathletes.info/uploads/media/Adverse\\_Analyzing\\_FINAL\\_.pdf](http://www.euathletes.info/uploads/media/Adverse_Analyzing_FINAL_.pdf).
- (37) **PAOLI L, DONATI S**. *The Sports Doping Market: Understanding Supply and Demand, and the Challenges of Their Control*. New York: Springer (2013) (see pp. 141-150)
- (38) **PARZELLER M, PRITTWITZ C, BRATZKE I H, CALDARELLI M, CENTAMORE R, LAPETRA COSTA M, FLAIG B, HEISEL HS, KLOKA D, LAUX J, PRITTWITZ S, RASCHKA C, ROEBEL A, RÜDIGER C, WENK M, ZEDLER B**. Rechtsvergleich der strafrechtlichen Normen und der strafprozessualen Verfolgung des Dopings im Leistungs- und Spitzensport in Deutschland, Italien, Frankreich, Schweiz und Spanien. *BISp-Jahrbuch Forschungsförderung 2009/10*, 315-326, [http://bispp.de/SharedDocs/Downloads/Publikationen/Jahrbuch/Jb\\_200910\\_Artikel/Parzeller\\_315\\_326.pdf?\\_\\_blob=publicationFile](http://bispp.de/SharedDocs/Downloads/Publikationen/Jahrbuch/Jb_200910_Artikel/Parzeller_315_326.pdf?__blob=publicationFile)
- (39) **PITSCH W**. "The science of doping" revisited: Fallacies of the current anti-doping regime. *Eur J Sport Sci*. 2009;9(2):87-95. doi:10.1080/17461390802702309.
- (40) **RAM H**. Democratic values and the global fight against doping. Paper presented at the Play the Game Conference. June 2009, Coventry. (Source: Waddington 2010)
- (41) **SAVULESCU J, FODDY B, CLAYTON M**. Why we should allow performance enhancing drugs in sport. *Br J Sports Med*. 2004;38(6):666-670. doi:10.1136/bjism.2003.005249.
- (42) **SIMON P**. Loopholes in the Testing System. Presentation to the Play the Game 2013 in Aarhus, Denmark, [http://www.playthegame.org/fileadmin/image/PtG2013/Presentations/28\\_October\\_Monday/28\\_okt\\_15.30\\_Marselissalen\\_Perikles\\_Simon.pptx.pdf](http://www.playthegame.org/fileadmin/image/PtG2013/Presentations/28_October_Monday/28_okt_15.30_Marselissalen_Perikles_Simon.pptx.pdf) (see slides 10-12)
- (43) **SOTTAS PE, ROBINSON N, SAUGY M**. The athlete's biological passport and indirect markers of blood doping. *Handbook of Experimental Pharmacology*, 195 (2010), 305-326. doi: 10.1007/978-3-540-79088-4\_14.
- (44) **STEINACKER JM**. Sportrecht – zwischen Gerechtigkeit und Fairness? *Dtsch Z Sportmed*. 2013; 64: 119. DOI: 10.5960/dzsm.2012.071
- (45) **TACITUS**. *Annals*. (various editions)
- (46) **ASSER INSTITUUT TMC**. The implementation of the WADA Code in the European Union. The Hague: T.M.C. Asser Instituut (2010). [http://www.asser.nl/upload/documents/9202010\\_100013rapport%20Asserstudie%20\(Engels\).pdf](http://www.asser.nl/upload/documents/9202010_100013rapport%20Asserstudie%20(Engels).pdf).
- (47) **VEST CHRISTIANSEN A**. "A Clean Amateur Makes a Good Professional": deviance, professionalism and doping in Danish cycling. In: Spitzer G (ed): *Doping and Doping Control in Europe*. Aachen: Meyer & Meyer (2006), 168-181 (see p. 168)
- (48) **WADA**. World Anti-Doping Code 2015, <https://wada-main-prod.s3.amazonaws.com/resources/files/wada-2015-world-anti-doping-code.pdf>
- (49) **WADA WORKING GROUP**. Report to WADA Executive Committee on Lack of Effectiveness of Testing Programs prepared by Working Group Established following Foundation Board meeting of 18 May 2012 Montreal: WADA (2013). <https://wada-main-prod.s3.amazonaws.com/resources/files/2013-05-12-Lack-of-effectiveness-of-testing-WG-Report-Final.pdf>
- (50) **WADDINGTON I**. Surveillance and control in sport: a sociologist looks at the WADA whereabouts system. *International Journal of Sport Policy and Politics*. 2010;2(3):255-274. doi:10.1080/1940694.0.2010.507210.
- (51) **WEWER G**. *Nachbetrachtung. Die NADA gestern, heute und morgen*. In: Nationale Anti Doping Agentur Deutschland (ed): *Gründung, Wirkung und Perspektiven der NADA*. Aachen: Meyer & Meyer (2010): 53-99