



# Position statement: IOC framework on fairness, inclusion and non-discrimination on the basis of gender identity and sex variations

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In November 2021, the International Olympic Committee (IOC) released the Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations.<sup>1</sup> The Framework aims to support International Federations (IFs) in the development of policies in relation to the participation of transgender (trans) athletes and/or athletes with sex variations that are sport-specific, evidence-based and rights-respecting. (The IOC Framework is informed by a human rights approach in its broadest sense, thereby also including the right to participate in sport as enshrined in the Olympic Charter). The Framework followed a unique and extensive process of stakeholder engagement, which considered all athletes including trans athletes and athletes with sex variations, as well as human rights, legal, scientific and medical experts. The purpose of this paper is to provide the international sports science and medicine community with an updated explanation of what the Framework is, how it aligns with existing scientific and medical knowledge and how it can usefully be put into practice across individual sports settings.

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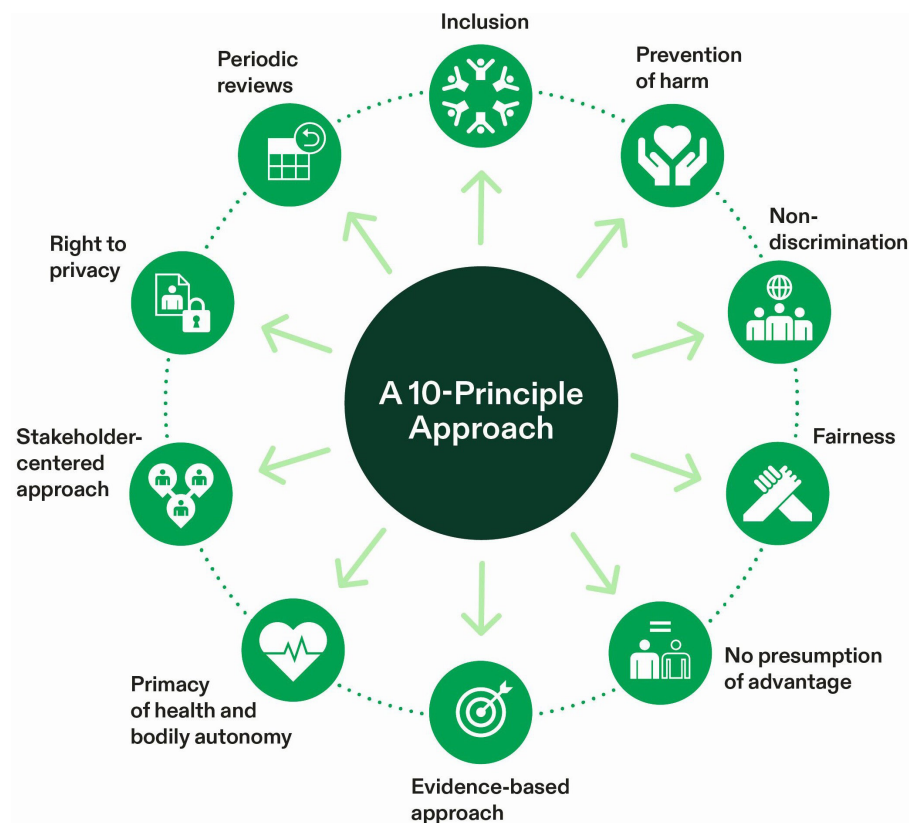
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The Framework serves as the comprehensive overarching reference document to guide the Olympic Movement in navigating this complex topic. It is informed by three values that are foundational to the Olympic Movement: fairness, inclusion and non-discrimination. When considering whether and how to introduce eligibility criteria for sex-segregated competition, IFs are encouraged to develop policy responses that embody all three of these values. To aid in this process, the Framework translates the values of fairness, inclusion and non-discrimination into 10 principles (figure 1). These principles, which are to be used as a cohesive whole, support IFs to undertake a holistic

and comprehensive decision-making process that considers the current state of scientific and medical knowledge<sup>2</sup> as well as ethical,<sup>3</sup> legal,<sup>4</sup> human rights,<sup>5</sup> safeguarding<sup>6</sup> and social<sup>7</sup> considerations. The Framework also aligns with the IOC's commitment to human rights as outlined in Olympic Agenda 2020+5.<sup>8</sup>

Like previous IOC guidance, the Framework is non-binding.<sup>9</sup> In a departure from previous eligibility guidance, it does not recommend a universal, one-size-fits-all approach to eligibility criteria for sex-segregated competition across the many sports, disciplines and events of the Olympic Movement. Rather, it recognises consensus that each sport, discipline and event is characterised by unique performance characteristics, which should inform the development of eligibility criteria.<sup>10</sup> IFs have the sport-specific knowledge needed to work with experts in identifying the metrics and data that may be relevant to defining fair and proportionate advantage in competition in the context of their own sport.

The Framework recognises the need for separate women's and men's categories in elite sports. It also acknowledges the significance of fair competition opportunities for the women's category, given the historical and



**Figure 1** The International Olympic Committee (IOC) Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations.

contemporary struggle for gender equality in sport.<sup>11</sup> The Framework does not preclude the possibility that certain individual athletes could be subject to participation restrictions or exclusions where an unfair and disproportionate advantage and/or unacceptable safety risk is clearly demonstrated and cannot be mitigated via reasonable accommodations. The challenge before IFs is to find ways to develop eligibility pathways that are fair and non-discriminatory and that provide opportunities for inclusion in an athlete's preferred category wherever possible, while also continuing to take meaningful action on gender equality.

The significant potential consequences of eligibility criteria—for individual athletes, grassroots sport and wider communities—should be considered as part of this process.<sup>12</sup> There are also important differences between grassroots and elite sport that warrant careful consideration and diverse policy responses.<sup>13</sup> By guiding IFs to engage holistically with this subject, the Framework serves as an important step toward ensuring the Olympic Movement celebrates diversity while offering safe, fair and inclusive sporting environments for all athletes, regardless of their status related to gender identity or sex variations.

## 1. INCLUSION

*1.1 Everyone, regardless of their gender identity, expression and/or sex variations should be able to participate in sport safely and without prejudice.*

*1.2 Measures should be put in place with a view to making sporting environments and facilities welcoming to people of all gender identities.*

*1.3 Sports organisations should work together to advance inclusion and prevent discrimination based on gender identity and/or sex variations, through training, capacity-building and campaigns that are informed by affected stakeholders.*

*1.4 Mechanisms to prevent harassment and abuse in sport should be further developed by taking into account the particular needs and vulnerabilities of transgender people and people with sex variations.*

*1.5 Where sports organisations choose to establish eligibility criteria in order to determine the participation conditions for men's and women's categories for specific contests in high-level organised sports competitions, these criteria should be established and applied in a manner that respects the principles included in this framework. Individuals*

*or parties responsible for issuing such criteria should be appropriately trained in order to ensure that these issues are handled in a manner consistent with these principles.*

*1.6 The design, implementation and evaluation of these measures and mechanisms should be done in consultation with a cross-section of affected athletes.*

Principle 1 aims to fulfil the fundamental principles of Olympism as reflected in the Olympic Charter, which states that the practice of sport is a human right.<sup>14</sup> Trans athletes and athletes with sex variations regularly face barriers to participation in sport, from grassroots to elite levels.<sup>13 15 16</sup> Those who do find ways to participate in sport can face harassment, violence and even sexual assault.<sup>17</sup> In recognition of both the values embedded in the Olympic Charter and the enormous potential of sport—from the grassroots to the elite level—to support the health, well-being and social integration of trans people and people with sex variations,<sup>18-21</sup> the Framework asks that IFs consider the important role of inclusion when developing their policy approach in this area.

Eligibility criteria should be reserved for elite competition only, with inclusion prioritised for youth and community sport. Given the potential for elite policies to be inappropriately applied in non-elite sporting contexts, there is a need for a clear demarcation of the boundary between elite and community and youth sport.<sup>13</sup> Since elite-level eligibility policies can compromise the acceptance of trans athletes and athletes with sex variations at all levels of sport, as well as their desire to participate, giving inclusion full consideration also means identifying a range of policy responses beyond elite-level eligibility criteria.<sup>13 22</sup> Principle 1 therefore calls on IFs and organisations throughout the Olympic Movement to identify barriers and work proactively toward ensuring a safe, supportive and respectful environment for trans athletes and athletes with sex variations at all levels of sport. In addition to taking actions at the elite level, IFs are encouraged to identify practical steps that can foster grassroots sporting environments that welcome the inclusion of trans athletes and athletes with sex variations. For example, this could include providing guidance on the best practices already being modelled in some jurisdictions, such as the resources for trans inclusion in club sports that have been developed by Sport Australia.<sup>23</sup>

## 2. PREVENTION OF HARM

*2.1 The physical, psychological and mental well-being of athletes should be prioritised when establishing eligibility criteria.*

*2.2 Sports organisations should identify and prevent negative direct and indirect impacts on athletes' health and well-being that may come from the design, implementation and/or interpretation of eligibility criteria.*

The IOC is committed to ensuring that all athletes within the Olympic Movement can practice sport in safe environments that positively support their health and well-being and are free from harassment and abuse.<sup>6</sup> This commitment is reflected in the 2019 IOC Consensus Statement on Mental Health in Elite Athletes<sup>24</sup> and in safeguarding guidelines issued to IFs and National Olympic Committees in 2016.<sup>25</sup>

Principle 2 recognises that eligibility criteria have the potential to cause serious and enduring harms to the athletes directly impacted.<sup>5 7</sup> These harms can be physical (eg, long-term health consequences of medical interventions to meet eligibility criteria), psychological (eg, trauma resulting from invasive medical examinations or media scrutiny resulting from violations of privacy), social (eg, ostracisation from family, community and sport) or political in nature (eg, persecution by state actors).<sup>5 7 26</sup> It is exceptionally challenging to ensure that eligibility criteria are implemented in ways that avoid such harms.<sup>27</sup>

Where sports bodies are considering eligibility criteria for trans athletes and/or athletes with sex variations, the decision-making process should account for any possible negative consequences for affected athletes. Such a process may reasonably lead an IF to decide that the potential harms to health and well-being are too great to justify imposing eligibility criteria, even at the elite level. Where eligibility criteria that restrict participation are adopted, preventing harm requires IFs to engage in ongoing assessment and mitigation of potential negative impacts.

## 3. NON-DISCRIMINATION

*3.1 Eligibility criteria should be established and implemented fairly and in a manner that does not systematically exclude athletes from competition based on their gender identity, physical appearance and/or sex variations.*

3.2 *Provided they meet eligibility criteria that are consistent with principle 4, athletes should be allowed to compete in the category that best aligns with their self-determined gender identity.*

3.3 *Criteria to determine disproportionate competitive advantage may, at times, require testing of an athlete's performance and physical capacity. However, no athlete should be subject to targeted testing because of, or aimed at determining, their sex, gender identity and/or sex variations.*

Non-discrimination is a basic principle of international human rights law and a core commitment of the Olympic Movement.<sup>14</sup> Transgender people and people with sex variations are considered by the United Nations as having characteristics requiring protection.<sup>28</sup> They are also recognised as facing disproportionately high rates of discrimination and violence across many national contexts.<sup>29 30</sup>

Principle 3 aims to ensure that where eligibility criteria are developed, they are free from discriminatory assumptions about a broad class of people. This includes assumptions about an athlete's sporting performance based purely on their sex variations or transgender status. IFs should also not make assumptions about an athlete's performance based on an athlete's physical appearance or gender expression.

Like cisgender people, trans individuals and people with sex variations constitute highly diverse populations, with considerable variation in their athletic performance capabilities. The Framework encourages IFs to explore approaches to eligibility criteria that recognise individual-level variation in the factors that shape athletic performance and/or safety risk across all eligible athletes. To be non-discriminatory, IFs should also consider each group on their own terms: trans athletes and athletes with sex variations should be approached as distinct groups facing distinct risks of harm. Findings from research on cisgender athletes may not be relevant to trans athletes, research on trans athletes may not be relevant to athletes with sex variations and so on.

The Framework calls on sports bodies to respect gender autonomy, whereby each individual should be free to define their own gender identity. This aligns with international human rights standards and was already acknowledged in the 2015 Consensus Statement.<sup>9 31</sup> As such, where eligibility criteria are developed, they should not lead to 'sex testing' or 'gender verification' procedures in any form. In addition to there being no true test of 'sex',<sup>32</sup> such practices can unnecessarily

harm vulnerable athletes and do not provide IFs with evidence of unfair and disproportionate performance advantage in competition.<sup>7 33</sup>

#### 4. FAIRNESS

4.1 *Where sports organisations elect to issue eligibility criteria for men's and women's categories for a given competition, they should do so with a view to:*

- A. *Providing confidence that no athlete within a category has an unfair and disproportionate competitive advantage (namely an advantage gained by altering one's body or one that disproportionately exceeds other advantages that exist at the elite-level competition).*
- B. *Preventing a risk to the physical safety of other athletes.*
- C. *Preventing athletes from claiming a gender identity different from the one consistently and persistently used, with a view to entering a competition in a given category.*

Principle 4 recognises that sports organisations may at times need to issue eligibility criteria for sex-segregated competition to maintain a fair and proportionate distribution of competitive advantages among participants.<sup>2</sup> It also recognises the particular importance of advancing equality for women in sport and preserving fair and meaningful competition for elite women athletes, which may require criteria that limit eligibility in some cases. The purpose of this principle is to guide sports organisations on how to ensure meaningful competition in ways that are fair to all athletes and are consistent with the Framework as a whole.

Pursuing an evidence-based approach (Principle 6) is key to ensuring meaningful competition. That is, Principle 6 is intended not only to avoid unwarranted and discriminatory restrictions but also to reassure all athletes that a fair process has been undertaken in reaching a decision regarding eligibility criteria. In determining what is to be defined as an unfair and disproportionate advantage, sports bodies ought to consider the full distribution of ability that already exists in their sport, including among all women. That is, the preservation of fair and meaningful competition should be informed by the diverse sources of advantage that are already deemed proportionate within existing competition categories.

The Framework recognises that safety is a concern in some sports. In such cases, eligibility criteria should not rely on an

athlete's gender identity or sex variations status as a proxy for injury risk.<sup>34</sup> Rather, IFs should focus on actual metrics of injury risk (eg, an individual's size and power) and take into account the variation in such risk factors that is already accommodated across all eligible athletes. Where there are risks in a given sport related to physical characteristics, mitigation measures should apply equally to all athletes who potentially pose a safety risk or are at risk of injury, and not only to those who identify as trans and/or have sex variations, since this would constitute a form of discrimination. The principle of fairness thus encompasses being fair to all athletes, including trans athletes and athletes with sex variations.

The Framework recognises that some Olympic Movement stakeholders are concerned about gender identity fraud. There is no evidence to suggest that such fraud has occurred or represents a meaningful future risk. Gender affirmation is a complex and lengthy process that varies for every individual and can have considerable impacts on a person's daily life, including a heightened risk of experiencing abuse and violence.<sup>29</sup> Should fraud emerge as an issue of practical concern, the Framework allows for regulations to be developed in response.

#### 5. NO PRESUMPTION OF ADVANTAGE

5.1 *No athlete should be precluded from competing or excluded from the competition on the exclusive ground of an unverified, alleged or perceived unfair competitive advantage due to their sex variations, physical appearance and/or transgender status.*

5.2 *Until evidence (per principle 6) determines otherwise, athletes should not be deemed to have an unfair or disproportionate competitive advantage due to their sex variations, physical appearance and/or transgender status.*

Principle 5 builds directly on the principle of non-discrimination and aims to help sports organisations avoid making assumptions about an athlete's ability solely on the basis of their biological or physiological characteristics, gender identity, sex variations status and/or gender expression/appearance. For all athletes, sporting performance is shaped by a diversity of physiological, institutional, economic, psychological and other factors.<sup>35-37</sup> Trans athletes and athletes with sex variations also come to sport with considerable variation in their performance capabilities. For example, the gender affirmation journeys of trans people are highly diverse,<sup>38</sup> with

potential implications for sporting performance. This includes the age of transition as well as whether and how they choose (or are able) to access medically affirming care.<sup>10 39 40</sup> As for all athletes, the performance capability of any individual trans or athlete with sex variations cannot be assumed.

While a Framework-led process may consider the relevance of endogenous testosterone levels, it should not be assumed a priori that a certain level of testosterone will predict the performance of an individual athlete. In addition to considerable individual-level variation in performance, the relevance of testosterone will vary across sports.<sup>2</sup> This principle thus calls on sports organisations to base assessments of performance advantage and/or safety risk on relevant data rather than assumptions and to consider how to account for individual-level variation in sporting ability. It also encourages IFs to default to inclusion where there is an absence of evidence-based justification to exclude or limit participation.

## 6. EVIDENCE-BASED APPROACH

6.1 *Any restrictions arising from eligibility criteria should be based on robust and peer-reviewed research that:*

A. *Demonstrates a consistent, disproportionate competitive advantage in performance and/or an unpreventable risk to the physical safety of other athletes.*

B. *Is largely based on data collected from a demographic group that is consistent in gender and athletic engagement with the group that the eligibility criteria aim to regulate.*

C. *Demonstrates that such disproportionate competitive advantage and/or unpreventable risk exists for the specific sport, discipline and event that the eligibility criteria aim to regulate.*

6.2 *Should eligibility criteria prevent an athlete from entering a given competition, such athlete should:*

A. *Be allowed to participate in other disciplines and events for which they are eligible, in the same gender category.*

B. *Be able to contest the ultimate decision of International Federations or other sports organisations through an appropriate internal mediation mechanism, such as ombudsperson and/or procedures before the Court of Arbitration for Sport, to seek remedy.*

Principle 6 aims to support sports organisations to identify appropriate evidence in deciding whether and how to define unfair and disproportionate advantage in the context of their sport, disciplines and/or events. The Framework is not for or against any one approach to regulating eligibility for sex-segregated competition. For example, it neither endorses nor prohibits the use of testosterone levels as part of eligibility criteria for trans athletes. The IOC acknowledges that testosterone may be an important factor shaping performance in elite athletes in certain sports, events and disciplines.<sup>2 34</sup> It also acknowledges that, where established as relevant, testosterone levels could be investigated as a means to mitigate performance and offer some trans athletes a pathway to inclusion in elite sport.<sup>34</sup> However, a robust and evidence-based approach to eligibility criteria starts with an assessment of unfair and disproportionate advantage that is informed by the specificities of a given sport/discipline/event, is supported by appropriate data and is consistent with the Framework as a whole.

Research on the performances of trans athletes is a limited though growing field.<sup>9 13 34 41</sup> An important consideration is the choice of study population. For example, it would not be appropriate to rely on data drawn from cisgender male athletes to draw conclusions about trans women.<sup>34</sup> In the case of trans women who have chosen to pursue gender-affirming hormone care, for instance, existing research shows that their performance capabilities diminish across a variety of tests relative to cisgender men.<sup>42 43</sup> Such women do not equate to cisgender men either in physiological terms or in performance.<sup>42 43</sup> Similarly, data collected from non-athletic individuals or non-elite athletes may have limited relevance to high-performance athletes, since it does not account for the major contribution of athlete and training status and the interaction with longitudinal changes accrued during diverse gender affirmation journeys on overall performance and performance-related phenotypes.<sup>10 34</sup> However, the exceedingly low rates of sports participation of trans athletes—stemming from stigma, discrimination and social isolation as well as the small size of the trans population to begin with—make it challenging to establish evidence-based and sports-specific performance metrics for this highly diverse group.<sup>13</sup>

Useful data relevant to defining disproportionate advantage come from both the individual athlete and the wider athlete population. In the

case of Australian Rules Football, for example, the Australian Football League's (AFL) elite transgender eligibility policy includes an assessment of trans athletes' height, weight, bench press and squat capabilities, 20 m sprint time, vertical jump, game-specific GPS data and 2 km run time.<sup>44</sup> Rather than relying on testosterone levels or other characteristics alone, these metrics are used to generate information about an individual athlete's actual sport-specific performance capabilities vis-à-vis the wider population of athletes. In this team sport example, the AFL seeks to ensure that eligibility decisions about an individual athlete are informed by the full distribution of ability within the sport. While the AFL approach is not without challenges,<sup>45</sup> it points to the important distinction between testosterone levels and an individual athlete's actual performance capabilities. IFs have the sport-specific knowledge to develop evidence-based considerations in the context of their own sport, with support from scientific and medical staff and/or advisors.

## 7. PRIMACY OF HEALTH AND BODILY AUTONOMY

7.1 *Athletes should never be pressured by an International Federation, sports organisation or any other party (either by way of the eligibility criteria or otherwise) to undergo medically unnecessary procedures or treatment to meet eligibility criteria.*

7.2 *Criteria to determine eligibility for a gender category should not include gynaecological examinations or similar forms of invasive physical examinations, aimed at determining an athlete's sex, sex variations or gender.*

7.3 *Sports organisations should seek to educate coaches, managers and other members of the entourage to prevent interpretations of their eligibility criteria that can lead to harm.*

Principle 7 aims to ensure that athletes are not pressured or coerced into making potentially harmful decisions about their bodies and/or health for the sole purpose of being allowed to compete. It calls on IFs to avoid drafting eligibility criteria in a way that may pressure or incentivise athletes to undergo medically unnecessary investigations or procedures that they would not otherwise agree to for their own gender identity, health or well-being reasons. (The question of 'treatment' for athletes with sex variations was a topic of unresolved debate among the authors of

this paper. Further discussion is needed to reconcile performance considerations with the documented harms of medically unnecessary interventions for this group of women athletes.) Existing medical literature on standards of care for trans people and people with sex variations clearly states that their engagement with gender-affirming medical care is and should be highly individualised.<sup>39 40 46</sup> For example, there is no singular standard of care that is recommended for trans people.<sup>39 40</sup> While trans individuals should be able to access gender-affirming medical care where they have decided it is necessary for their own individual gender identity needs, the interventions they choose can be highly varied.<sup>47</sup> Some trans people will pursue gender-affirming medical care as part of their individual gender affirmation journey.<sup>39 40</sup> It may be reasonable to take such choices into account when assessing eligibility, in cases where this is supported by appropriate evidence.

The case of individuals with sex variations is in many ways more complex. Medical professionals increasingly debate whether interventions can be deemed medically necessary, given the growing recognition of the importance of individual choice and the potential health and well-being consequences of surgery and other medical interventions.<sup>46 48</sup> For example, it is now recognised that the risk of gonadal tumours in some individuals can be managed via regular monitoring, rather than requiring surgery a priori.<sup>46 49</sup> Many individuals may not be aware that they have sex variations, adding to the ways in which eligibility criteria for such athletes can result in unique and irreparable harms.<sup>5 26</sup> Point 7.1 is thus particularly relevant to the situation of athletes with sex variations, where medically unnecessary investigations should not take place.<sup>49</sup> Given these concerns, as well as other substantive and procedural differences between regulations for trans athletes and athletes with sex variations, a framework-led process should lead to separate policy approaches for the two groups. An IF could also decide that eligibility criteria are not a suitable policy response for athletes with sex variations, given their particular vulnerabilities.

Relatedly, informed consent should be carefully considered as part of Principle 7. An athlete may not be able to make a free choice that truly reflects their own health and gender identity needs and preferences when made to choose between undergoing a medical intervention (eg, to lower their testosterone level) and continuing to compete

as part of their professional career and livelihood.<sup>26 50</sup> Informed consent is also compromised where there is a language or cultural barrier, limited access to independent medical or legal advice or coercion from an athlete's entourage.<sup>26</sup> IFs should identify how to educate all relevant stakeholders to ensure appropriate implementation of eligibility criteria and undue pressure on athletes.

## 8. STAKEHOLDER-CENTRED APPROACH

*8.1 When drafting, reviewing, evaluating and updating eligibility criteria, sports organisations should meaningfully consult with a cross-section of athletes who may be negatively affected in order to prevent harm.*

*8.2 Any decisions affecting an athlete's ability to compete should follow the basic standards of procedural fairness, including neutrality and impartiality.*

*8.3 Sports organisations should put in place internal mechanisms that offer athletes and other affected stakeholders accessible, legitimate, safe and predictable avenues to raise concerns and grievances connected to gender-based eligibility.*

Stakeholder engagement is a necessary and valuable part of an organisation's efforts to uphold human rights and prevent violations.<sup>51</sup> Principle 8 of the framework aims to ensure that sports bodies consider the perspectives and lived experiences of those who may be affected by the development and implementation of eligibility criteria. This is a particularly valuable opportunity to constructively engage with the athletes that would be most directly impacted by eligibility criteria, namely trans athletes and/or athletes with sex variations.

The challenges of undertaking effective and safe stakeholder engagement should not be underestimated. IFs should seek to partner with advocacy groups or facilitators that are trusted by the trans community and/or athletes with sex variations and that have experience in stakeholder engagement. Stakeholder engagement should be designed to gather actual lived experiences with relevance to policy, rather than discriminatory or unfounded views.

A fundamental component of human rights norms and standards is access to justice and effective remedy.<sup>51</sup> Given eligibility criteria may result in decisions that could significantly impact the life and careers of athletes, point 8.3 calls on sports organisations to provide robust, transparent and accessible mechanisms

through which grievances and concerns can be raised and effectively and efficiently addressed. This is particularly important in the context of criteria that may disqualify athletes from participating in upcoming or time-bound events (ie, events that occur infrequently such as the Olympic Games).

## 9. RIGHT TO PRIVACY

*9.1 Sports organisations should ensure transparency in their decision-making processes on eligibility while working to preserve the privacy of individuals who may be affected by such restrictions. This includes all personally identifiable information processed in the context of eligibility decisions which should be handled in compliance with applicable laws and international standards.*

*9.2 Medical information about an athlete, including testosterone levels, that is collected in the context of antidoping or otherwise, must be handled in compliance with applicable privacy laws and should be used only for the purposes disclosed to the athlete at the time such information is collected.*

*9.3 Informed consent should be acquired from athletes prior to the collection of data that is obtained for the purpose of determining eligibility to compete in the men's or women's category.*

*9.4 Sports organisations should avoid public disclosure of athletes' confidential health and other personal information in the absence of the athlete's consent. In addition, sports organisations should consult with the athletes concerned on the best ways to publicly communicate about their eligibility.*

Principle 9 aims to ensure that the personally identifiable information (PII) of athletes is duly protected. While this protection is important for the privacy of all athletes, the misuse of PII can have particular and significant impacts on transgender athletes and athletes with sex variations. Some athletes may have chosen not to publicly disclose their trans or sex variations status. Privacy breaches are a continuing common occurrence in the regulation of eligibility for trans athletes and/or athletes with sex variations, pointing to the difficulty of ensuring adherence to implementation guidelines.<sup>52</sup> They can result in athletes experiencing lasting damage to their personal and professional relationships as well as to their personal safety.<sup>5 7</sup> IFs implementing eligibility criteria should therefore take

special precautions to ensure that athletes' rights to privacy are not infringed.

## 10. PERIODIC REVIEWS

*10.1 Eligibility criteria should be subject to predictable periodic review to reflect any relevant ethical, human rights, legal, scientific and medical developments in this area and should include the affected stakeholder's feedback on their application.*

Since terminology in this policy area continues to evolve, periodic review should also attend to the language used in policy documents to ensure that it remains relevant and respectful.

## CONCLUSION

Reflecting this evolving policy landscape, the IOC has moved from one-size-fits-all guidance toward a principled approach to be undertaken on a sport-by-sport basis. The Framework is a necessary intervention in a landscape that has become highly divisive, and in which Olympic Movement stakeholders are too often told they must choose between fairness and inclusion. The position of the IOC, as exemplified by the Framework, is that Olympic Movement stakeholders should be guided by each of fairness, inclusion and non-discrimination when considering whether and how to introduce eligibility criteria for sex-segregated competition. IFs should strive for policies that value and advance inclusion, maintain fair and meaningful competition and are fair to all athletes by recognising their diversity and not relying on biased assumptions to decide the terms of their participation. The Framework calls for a multidisciplinary, athlete-centred approach to eligibility criteria that is informed by robust research and appropriate data and gives full consideration to human rights, legal aspects and athlete health and well-being.<sup>2</sup> The Framework supports IFs to realise such a process.

The sports science and medicine community represents a vital partner on this journey. Laboratory-based, empirical research that can contribute to better understanding the complexities of performance across the full sex and gender spectrum of elite sport will be critical to expanding the relevant evidence base and developing policy approaches that are consistent with the spirit of the Framework and its 10 constituent principles. To this end, it is critical that sports stakeholders and major funding bodies outside of sport direct funds toward research innovation in this space. With eligibility criteria facing increasing scientific<sup>53</sup> and human rights

scrutiny,<sup>31</sup> the question of what constitutes disproportionate advantage—and how it can be defined in ways that are sport-specific and fair to all athletes—remains central to effective regulation. The IOC applauds the sports science and medicine community for emphasising that the health and well-being of athletes be a driving concern when IFs consider whether and how to develop eligibility rules for trans and/or athletes with sex variations.<sup>2 10</sup>

The Framework invites IFs to be innovators in this area of policy-making. However, the IOC also recognises that implementing the Framework is not without challenges. For example, although IFs are unquestionably the experts of their own sport, they vary in their capacity to produce the data that can underpin sport-specific policy approaches. Additionally, not all IFs have ready access to the diverse forms of expertise that a Framework-guided approach calls for. The IOC is committed to assisting all interested IFs to implement the Framework in their own context. This assistance is taking various forms, including webinars, workshops and practical implementation guidance. Sports science and medical experts are invited to work with the IOC in this process of translating the Framework into actions that will strengthen the Olympic Movement and the positive role of sport in society.

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## REFERENCES

- International Olympic Committee. IOC framework on Fairness, inclusion and Non-Discrimination on the basis of gender identity and sex variations. Available: [https://stillmed.olympics.com/media/Documents/News/2021/11/IOC-Framework-Fairness-Inclusion-Non-discrimination-2021.pdf?\\_ga=2.161647740.1701831780.1662638218-1095681707.1646126407](https://stillmed.olympics.com/media/Documents/News/2021/11/IOC-Framework-Fairness-Inclusion-Non-discrimination-2021.pdf?_ga=2.161647740.1701831780.1662638218-1095681707.1646126407)
- Pigozzi F, Bigard X, Steinacker J, *et al*. Joint position statement of the International Federation of sports medicine (FIMS) and European Federation of sports medicine associations (EFSMA) on the IOC framework on Fairness, inclusion and non-discrimination based on gender identity and sex variations. *BMJ Open Sport Exerc Med* 2022;**8**:e001273.
- World Medical Association. WMA Declaration on principles of health care in sports medicine, 2021. Available: <https://www.wma.net/policies-post/wma-declaration-on-principles-of-health-care-for-sports-medicine/>
- Patel S. *Inclusion and Exclusion in Competitive Sport*. London: Routledge, 2015.
- Human Rights Watch. They're Chasing Us Away from Sport. *Human Rights Violations in Sex Testing of Elite Women Athletes* 2020 <https://www.hrw.org/report/2020/12/04/theyre-chasing-us-away-sport/human-rights-violations-sex-testing-elite-women>
- Mountjoy M, Brackenridge C, Arrington M, *et al*. International Olympic Committee consensus statement: harassment and abuse (non-accidental violence) in sport. *Br J Sports Med* 2016;**50**:1019–29.
- Karkazis K, Jordan-Young R, Davis G, *et al*. Out of bounds? A critique of the new policies on hyperandrogenism in elite female athletes. *Am J Bioeth* 2012;**12**:3–16.
- International Olympic Committee. Olympic agenda 2020+5, 2021. Available: [https://stillmed.olympics.com/media/Document%20Library/OlympicOrg/IOC/What-We-Do/Olympic-agenda/Olympic-Agenda-2020-5-15-recommendations.pdf?\\_ga=2.106211850.888322152.1649936398-1095681707.1646126407](https://stillmed.olympics.com/media/Document%20Library/OlympicOrg/IOC/What-We-Do/Olympic-agenda/Olympic-Agenda-2020-5-15-recommendations.pdf?_ga=2.106211850.888322152.1649936398-1095681707.1646126407)
- International Olympic Committee. IOC consensus meeting on sex reassignment and hyperandrogenism, 2015. Available: [https://stillmed.olympic.org/Documents/Commissions\\_PDFfiles/Medical\\_commission/2015-11\\_ioc\\_consensus\\_meeting\\_on\\_sex\\_reassignment\\_and\\_hyperandrogenism-en.pdf](https://stillmed.olympic.org/Documents/Commissions_PDFfiles/Medical_commission/2015-11_ioc_consensus_meeting_on_sex_reassignment_and_hyperandrogenism-en.pdf)
- Hamilton BR, Guppy FM, Barrett J, *et al*. Integrating transwomen athletes into elite competition: the case of elite archery and shooting. *Eur J Sport Sci* 2021;**21**:1500–9.
- International Olympic Committee. IOC gender equality review project, 2018. Available: <https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/IOC/What-We-Do/Promote-Olympism/Women-And-Sport/Boxes%20CTA/IOC-Gender-Equality-Report-March-2018.pdf>
- Bekker S, Storr R, Posbergh A. Inclusion, Fairness and non-discrimination in sport: a wider lens. *Br J Sports Med* 2022;**56**:1064–5.
- Jones BA, Arcelus J, Bouman WP, *et al*. Sport and transgender people: a systematic review of the literature relating to sport participation and competitive sport policies. *Sports Med* 2017;**47**:701–16.
- International Olympic Committee Olympic Charter, 2021. Available: <https://stillmed.olympics.com/media/Document%20Library/OlympicOrg/General/EN->

- Olympic-Charter.pdf?\_ga=2.36440489.888322152.1649936398-1095681707.1646126407
- 15 Hartmann-Tews I, Menzel T, Braumüller B. Homo- and transnegativity in sport in Europe: experiences of LGBT+ individuals in various sport settings. *Int Rev Sociol Sport* 2021;56:997–1016.
  - 16 Hargie ODW, Mitchell DH, Somerville IJA. 'People have a knack of making you feel excluded if they catch on to your difference': Transgender experiences of exclusion in sport. *Int Rev Sociol Sport* 2017;52:223–39.
  - 17 Smith M, Cuthbertson S, Gale N. *Out for sport: tackling transphobia in sport. transgender specific companion report*. Edinburgh: Equality Network, 2012.
  - 18 Barrera E, Millington K, Kremen J. The medical implications of banning transgender youth from sport participation. *JAMA Pediatr* 2022;176:223–4.
  - 19 Caudwell J. Transgender and non-binary swimming in the UK: indoor public pool spaces and un/safety. *Front Sociol* 2020;5:64.
  - 20 Storr R, Richards J. 'The tennis club is my safe space': assessing the positive impact of playing tennis on LGBT+ people in Australia. *Sport Educ Soc* 2022;5:1–14.
  - 21 Cunningham GB, Buzuvis E, Mosier C. Inclusive spaces and locker rooms for transgender athletes. *Kinesiol Rev* 2018;7:365–74.
  - 22 Phipps C. Thinking beyond the binary: barriers to trans\* participation in University sport. *Int Rev Sociol Sport* 2021;56:81–96.
  - 23 Sport Australia. Trans and gender diverse inclusion in sport. Available: [http://www.sportaus.gov.au/integrity\\_in\\_sport/transgender\\_and\\_gender\\_diverse\\_people\\_in\\_sport](http://www.sportaus.gov.au/integrity_in_sport/transgender_and_gender_diverse_people_in_sport)
  - 24 Reardon CL, Hainline B, Aron CM, et al. Mental health in elite athletes: international Olympic Committee consensus statement (2019). *Br J Sports Med* 2019;53:667–99.
  - 25 International Olympic Committee. IOC guidelines for international Federations (IFs) and national Olympic committees (NOCs) related to creating and implementing a policy to safeguard athletes from harassment and abuse in sport, 2016. Available: [https://cdn.dosb.de/alter\\_Datenbestand/Bilder\\_allgemein/Veranstaltungen/Rio\\_2016/Guidelines\\_for\\_IFs\\_and\\_NOC\\_related\\_to\\_safeguarding\\_athletes\\_from\\_harassment\\_and\\_abuse.pdf](https://cdn.dosb.de/alter_Datenbestand/Bilder_allgemein/Veranstaltungen/Rio_2016/Guidelines_for_IFs_and_NOC_related_to_safeguarding_athletes_from_harassment_and_abuse.pdf)
  - 26 Karkazis K, Carpenter M. Impossible "Choices": The Inherent Harms of Regulating Women's Testosterone in Sport. *J Bioeth Inq* 2018;15:579–87.
  - 27 Bekker S, Posbergh A. Safeguarding in sports settings: unpacking a conflicting identity. *Qual Res Sport Exerc Health* 2022;14:181–98.
  - 28 United Nations High Commissioner for Human Rights. Born free and equal: sexual orientation, gender identity and sex characteristics in international human rights law, 2019. Available: [https://www.ohchr.org/sites/default/files/Documents/Publications/Born\\_Free\\_and\\_Equal\\_WEB.pdf](https://www.ohchr.org/sites/default/files/Documents/Publications/Born_Free_and_Equal_WEB.pdf)
  - 29 Office of the United Nations High Commissioner for Human Rights. *Report of the High Commissioner for Human Rights on discrimination and violence against individuals based on their sexual orientation and gender identity, A/HRC/29/23*, 2015.
  - 30 Miller LR, Grollman EA. The social costs of gender nonconformity for transgender adults: implications for discrimination and health. *Social Forum* 2015;30:809–31.
  - 31 UN High Commissioner for Human Rights. Intersection of race and gender discrimination in sport, 2020. Available: [https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session44/\\_layouts/15/WopiFrame.aspx?sourcedoc=/EN/HRBodies/HRC/RegularSessions/Session44/Documents/A\\_HRC\\_44\\_26\\_AEV.docx&action=default&DefaultItemOpen=1](https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session44/_layouts/15/WopiFrame.aspx?sourcedoc=/EN/HRBodies/HRC/RegularSessions/Session44/Documents/A_HRC_44_26_AEV.docx&action=default&DefaultItemOpen=1)
  - 32 Karkazis K. The misuses of "biological sex". *Lancet* 2019;394:1898–9.
  - 33 Court of Arbitration for Sport. Arbitration CAS 2014/A/3759 Dutee Chand v. Athletics Federation of India (AFI) & International Association of Athletics Federations (IAAF), 2015. Available: <https://jurisprudence.tas-cas.org/Shared%20Documents/3759-PA.pdf>
  - 34 Hamilton BR, Lima G, Barrett J, et al. Integrating transwomen and female athletes with differences of sex development (DSD) into elite competition: the FIMS 2021 consensus statement. *Sports Med* 2021;51:1401–15.
  - 35 De Bosscher V, De Knop P, Van Bottenburg M, et al. A conceptual framework for analysing sports policy factors leading to international sporting success. *European Sport Management Quarterly* 2006;6:185–215.
  - 36 MacNamara Áine, Button A, Collins D. The role of psychological characteristics in facilitating the pathway to elite performance Part 1: identifying mental skills and behaviors. *Sport Psychol* 2010;24:52–73.
  - 37 Tucker R, Collins M. What makes champions? A review of the relative contribution of genes and training to sporting success. *Br J Sports Med* 2012;46:555–61.
  - 38 Scheim AI, Bauer GR. Sex and gender diversity among transgender persons in Ontario, Canada: results from a respondent-driven sampling survey. *J Sex Res* 2015;52:1–14.
  - 39 Coleman E. Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People: An Introduction. In: *Principles of gender-specific medicine*. Elsevier, 2017: 69–75.
  - 40 Safer JD, Tangpricha V. Care of transgender persons. *N Engl J Med Overseas Ed* 2019;381:2451–60.
  - 41 Jones PR, Voisin S, Nolan BJ, et al. Uncovering the effects of gender affirming hormone therapy on skeletal muscle and epigenetics: protocol for a prospective matched cohort study in transgender individuals (the game study). *BMJ Open* 2022;12:e060869.
  - 42 Roberts TA, Smalley J, Ahrendt D. Effect of gender affirming hormones on athletic performance in transwomen and transmen: implications for sporting organisations and legislators. *Br J Sports Med* 2021;55:577–83.
  - 43 Wiik A, Lundberg TR, Rullman E. Muscle strength, size, and composition following 12 months of gender-affirming treatment in transgender individuals. *J Clin Endocrinol Metab* 2020;105. doi:10.1210/clinem/dg247. [Epub ahead of print: 01 Mar 2020].
  - 44 Australian Rules Football. Gender diversity policy – AFL and AFLW, 2018. Available: <https://s.afl.com.au/staticfile/AFL%20Tenant/AFL/Files/Gender%20Diversity%20Policy.pdf>
  - 45 Adair D. The AFL's gender diversity policy remains an apprehensive work in progress. *The Conversation* 2018. <https://theconversation.com/the-afls-gender-diversity-policy-remains-an-apprehensive-work-in-progress-102904#:~:text=Because%20the%20AFL%E2%80%99s%20policy%20claims%20to%20meet%20the%20%E2%80%9Cstrength>
  - 46 Bangalore Krishna K, Kogan BA, Mazur T, et al. Individualized care for patients with intersex (differences of sex development): part 4/5. Considering the Ifs, Whens, and Whats regarding sexual-reproductive system surgery. *J Pediatr Urol* 2021;17:338–45.
  - 47 Reisner SL, Poteat T, Keatley J, et al. Global health burden and needs of transgender populations: a review. *Lancet* 2016;388:412–36.
  - 48 Lee PA, Nordenström A, Houk CP, et al. Global disorders of sex development update since 2006: perceptions, approach and care. *Horm Res Paediatr* 2016;85:158–80.
  - 49 World Medical Association. World Medical association urges physicians not to implement IAAF rules on classifying women athletes, 2020. Available: <https://www.wma.net/news-post/wma-urges-physicians-not-to-implement-iaaf-rules-on-classifying-women-athletes/>
  - 50 Hester JD, Intersex HJD. Intersex(es) and informed consent: how physicians' rhetoric constrains choice. *Theor Med Bioeth* 2004;25:21–49.
  - 51 UN High Commissioner for Human Rights. *The corporate responsibility to respect human rights: an interpretive framework*. New York and Geneva: United Nations, 2012.
  - 52 Patel S. Gaps in the protection of athletes gender rights in sport—a regulatory riddle. *Int Sports Law J* 2021;21:257–75.
  - 53 Pielke R, Tucker R, Boye E. Scientific integrity and the IAAF testosterone regulations. *Int Sports Law J* 2019;19:18–26.