

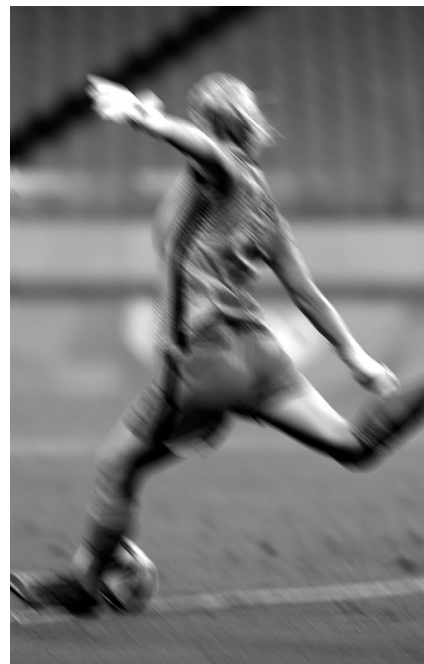


**ASSOCIATION  
OF SUMMER OLYMPIC  
INTERNATIONAL FEDERATIONS**

# **INTERNATIONAL FEDERATION ANTI-DOPING EXPENDITURE AND STRATEGY REPORT**

---

LAUSANNE, DECEMBER 2023



# Contents

<b>1. Foreword</b>	<b>4</b>
<b>2. Executive summary</b>	<b>6</b>
<b>3. Background and objectives</b>	<b>10</b>
<b>4. Anti-doping financial development</b>	<b>12</b>
<b>5. Strategy and operating model</b>	<b>24</b>
<b>6. Anti-doping ecosystem and stakeholder engagement</b>	<b>30</b>
<b>7. Future state of anti-doping</b>	<b>36</b>
<b>8. Methodology</b>	<b>44</b>
<b>9. Acknowledgements</b>	<b>50</b>



# Foreword



Doping undermines the fundamental values of sport, the integrity and the fairness of competitions and, last but not least, it poses serious threats to the health of athletes. As the international governing bodies of all Summer Olympic sports, the Association of Summer Olympic International Federations (ASOIF) member federations, for decades, have been playing a key role in global anti-doping efforts.

Taking stock of developments in this most important area remains critical in order to assess progress; identify challenges, opportunities and trends; and optimise strategies and support whenever possible. ASOIF's *International Federation Anti-Doping Expenditure and Strategy Report* follows two previous editions, published in 2010 and in 2016 respectively. With the 2016 report having provided important impetus for the set-up of the International Testing Agency (ITA) in 2018, it is our hope that our 2023 study will build on past achievements and also significantly contribute to innovative and impactful solutions aimed at protecting clean athletes.

Looking at the study outcomes, the trend seems promising. With the creation of the ITA and several Integrity Units as independent service-providers, the anti-doping landscape has evolved significantly since 2016. This report also reveals accelerated annual growth in International Federations' (IFs') anti-doping expenditure from 2015-2022. In addition, there is a more equitable distribution of anti-doping costs amongst IFs and a greater commitment to anti-doping efforts from smaller IFs. Likewise, it is positive news that the large majority of our member federations anticipates continued augmentation of anti-doping budgets with a wider use of ITA services.

As such, this report very much reflects ASOIF's mission, which is to unite, support and promote the Summer Olympic IFs, to preserve their autonomy, and to represent their common interests and goals. We also aim to act as an added-value provider to the Olympic Movement at large, and to clearly define and uphold the role of the IFs in an increasing complex sports world.

For this third study, all 33 ASOIF members participated, including the five new IFs that have become members since the 2016 report.

Their anti-doping experts shared critical insights, such as how they run anti-doping operations today, and future strategic plans. The results were analysed in coordination with our team of anti-doping experts and are presented here for the benefit of the broader anti-doping community.

This report demonstrates our member federations' commitment to strengthen their anti-doping strategies through transparent communication and stakeholder collaboration and we would like to thank them for their invaluable dedication. We would also like to extend our sincere thanks to our AMSCG, which has led this project, to the ITA and the World Anti-Doping Agency (WADA) for their critical support to the study, and to the experts from Altman Solon, who have put this report together. We are also grateful to the International Olympic Committee for its close collaboration and continuous financial support to the ITA. There is no time to be complacent. Let's use the outcomes of this report to further improve our fight against doping and thereby help ensure a safe and fair sporting environment, which each and every athlete deserves so much.



**Francesco Ricci Bitti,**  
ASOIF President

# 2

## Executive summary



The participation of ASOIF member federations in the 2023 Anti-doping Survey, along with significant support from WADA and the ITA on the financial analysis, is indicative of substantial progress in global anti-doping efforts since ASOIF's last study in 2016.

This progress has continued despite the global pandemic and periods of global economic slowdown.

Simultaneously, the independence and professionalism of anti-doping operations have set a new template for all IFs.



## Key findings

The report's key findings present a positive snapshot of anti-doping in 2023 and a promising outlook for the future:

- ▼ Total IF spending increased from \$27.7 million in 2015 to \$51.4 million in 2022, demonstrating an annual growth rate of 6.8 per cent (when adjusted for inflation).
- ▼ The top-six IFs contributed 65 per cent of the total anti-doping expenditure in 2022, compared to 80 per cent in 2015, indicating a more even distribution of costs among IFs.
- ▼ Testing and sample analysis continued to dominate IF expenditure in 2022, accounting for 72 per cent of the total.
- ▼ Spending on Intelligence and Investigations (I&I) showed the highest annual growth rate at 53.3 per cent, increasing from \$0.1 million in 2015 to \$2.4 million in 2022. Introduced to the WADA Code in 2015, I&I has now become a pivotal programme area for most IFs.
- ▼ Education spending also saw a significant increase, from \$0.8 million to \$1.7 million in 2022, with all IFs expressing intent to prioritise this area in the next four years.
- ▼ The percentage of IFs fully outsourcing their operations to independent service providers reached 48 per cent in 2022 and is projected to increase to 64 per cent over the next four years.

## Programme areas

The predominant share of IFs' anti-doping funds (72 per cent of total budget) continues to be allocated to testing and sample analysis, while an increased provision towards I&I and education programmes suggests a new investment focus for IFs (eight per cent in 2022 compared to 2.8 per cent in 2015).

The increased investments in these two areas are expected to continue, although the impact of inflation and greater regulatory demands may slow down progress.

## Budgets

On aggregate, 85 per cent of IFs anticipate continued growth of their budgets over the next four years, with 15 per cent expected to maintain the same budgets, and no IF planning reductions.

Based on survey responses, 55 per cent of IFs are collaborating with independent service providers, like the ITA or Integrity Units, to formulate their budgets.

Furthermore, IF management, in conjunction with their external partners, are adopting a methodical

budgeting process characterised by enhanced transparency and consistent application of criteria to distribute resources systematically.

## ITA and Integrity Units

The ITA's role in overseeing IFs' anti-doping programmes has expanded significantly and is projected to assume the majority of IF anti-doping operations. In addition, nearly all IFs (85 per cent) rely on the ITA or their respective Integrity Units to develop their anti-doping strategies, highlighting the improved independence of IF anti-doping programmes.

## Integrity and credibility

The prevailing sentiment among survey respondents indicates that IF management and athletes are the stakeholder groups most aware of the importance of anti-doping in upholding the integrity and credibility of their respective sports. Conversely, respondents think that public authorities, sponsors, and media appear to be relatively less engaged. Anti-doping personnel believe that future strategies to engage stakeholders should emphasise the urgency of the fight against doping by highlighting the detrimental impact of doping on sports and athletes.







## Conclusion

Throughout the IF survey and individual discussions with WADA, the ITA, and IF anti-doping personnel, there has been a noticeable alignment in the professional approaches and methodologies used to formulate strategies, allocate budgets, and achieve anti-doping objectives.

Survey respondents have shown a particular inclination toward allocating budgets based on the risk associated with each sport and utilising intelligence for more strategic testing. In addition, boosting investments in prevention and educational initiatives will help improve the capabilities of Anti-Doping Organisations (ADOs).

Furthermore, there is a willingness among IFs to engage strategically with other stakeholders to emphasise the urgency of combating doping and preventing its adverse effects on sports and athletes.

Overall, IFs are confident in their readiness to tackle forthcoming challenges and seize opportunities. They aim to achieve this by adopting innovative approaches and proactive strategies across various domains.

We anticipate further discussions with our member federations based on the publication's findings.

## Future priorities

Over the next four years, IFs aim to prioritise education while maintaining testing as a fundamental element of their anti-doping strategies. The majority of IFs are in favour of innovative approaches like intelligence-driven testing, cost-effective testing technologies and scientific and social research.

Furthermore, anti-doping personnel are acutely conscious of impending threats arising from emerging doping technologies, budget constraints, resource limitations and the potential repercussions from significant doping scandals in their respective sports.

Additionally, IFs' prevailing inclination to focus on prevention and adopt innovative methods for testing, intelligence, and education signals a synchronised commitment to the future of anti-doping innovation.



# 3

## Background and objectives



Under the leadership of the ASOIF Medical and Science Consultative Group (AMSCG), ASOIF's two previous anti-doping studies (2010 and 2016) measured the Summer IFs' level of anti-doping expenditure. The 2016 report surveyed 28 IFs and substantiated the significant increase in efforts and investment they collectively made in the fight against doping.

Since 2016, the anti-doping landscape has evolved significantly with further professionalisation and improved coordination between the various stakeholders within the anti-doping ecosystem.

For this third study, all 33 ASOIF members participated, including the five new IFs that have become members since the 2016 report. To fully leverage existing financial data about IF anti-doping expenditures, ASOIF worked closely with WADA and the ITA.

In addition to anti-doping expenditures, ASOIF added a complementary survey collecting insights from IFs' anti-doping personnel on current and future trends related to their strategies and operations.

The 2023 report has five principal objectives:

- ▼ Determine an overview of IFs' anti-doping expenditures in 2022.
- ▼ Provide a comparison between IFs' anti-doping expenditures in 2015 and 2022.
- ▼ Understand and demonstrate the changes within the IF anti-doping ecosystem.
- ▼ Generate insights on current and future trends of IFs' anti-doping strategies and operating models.
- ▼ Evaluate future opportunities and challenges in anti-doping.



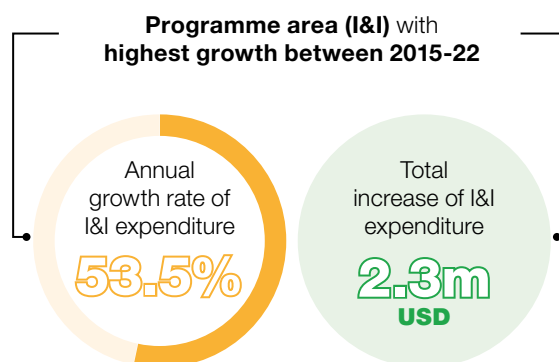
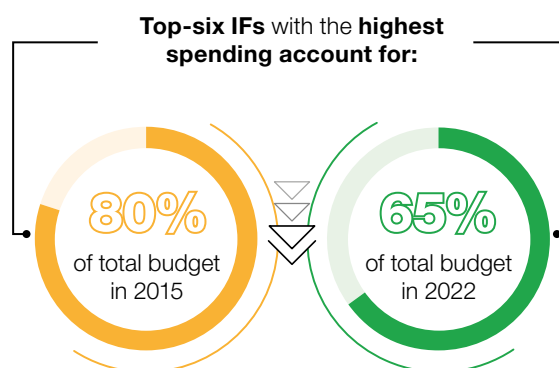
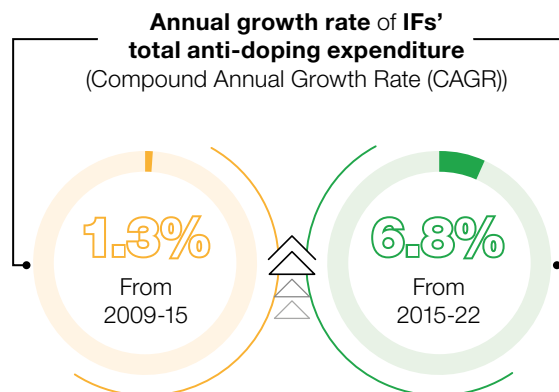
# 4

## Anti-doping financial development



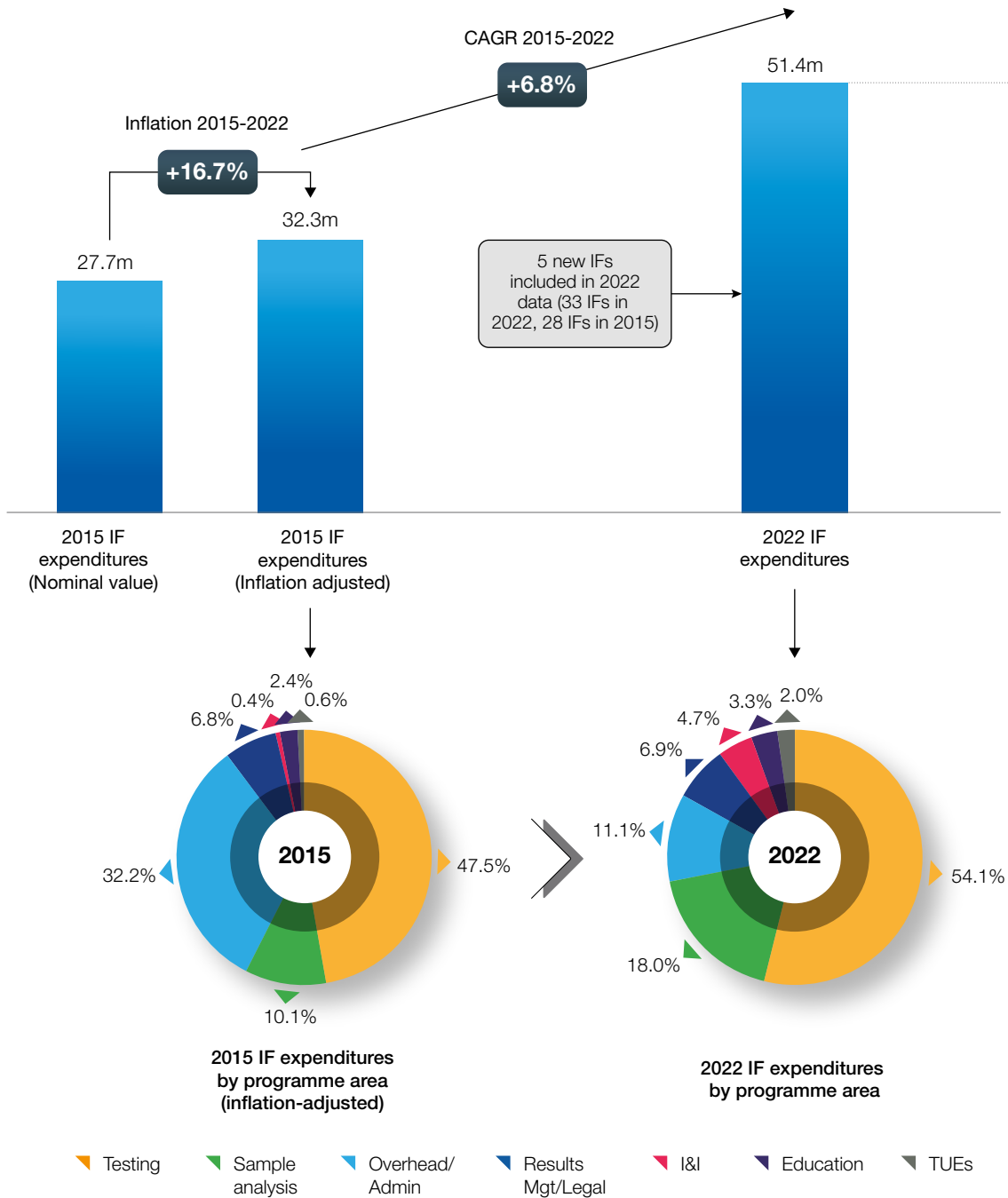
### Insight 1: Accelerated growth in anti-doping expenditure raises the stakes for the IFs' fight against doping

- IFs increased their total spending by \$19.1 million between 2015-22, with an annual growth rate significantly higher (6.8 per cent) than the previous period of 2009-15 (1.3 per cent). The proportion of IFs' anti-doping expenditure made by the top-six spenders declined by 15 per cent compared to 2015. This shift suggests a more equitable distribution of anti-doping costs amongst IFs and a greater commitment to anti-doping efforts from smaller IFs. Furthermore, spending increased across most programme areas and at the same time, IFs demonstrated a growing commitment to emerging programme areas such as education and I&I, with significantly higher investments made.
- I&I, a programme area established in 2015, has grown remarkably with an annual increase in spending of 53.3 per cent. Since its inclusion in the 2015 WADA Code, it has grown to become an integral part of IFs' efforts to tackle doping by developing increasingly sophisticated techniques to detect doping violations across the spectrum of doping actors. Use of external providers for investigations and intelligence-gathering, extensive interviewing of athletes, their entourages, other sources and continuous cross-checking of facts are some of the activities that are resource-intensive for this programme area.
- The only programme area that recorded a decline in spending was overhead costs, encompassing expenses related to IF staff salaries and various internal administrative outlays. This decrease could be attributed to IFs outsourcing some of their operations to service providers, such as the ITA. These new providers have introduced more transparency in allocating resources to programme areas, while also enhancing professionalism and centralisation in administrative activities, which in turn will foster greater economies of scale and reduction in overhead costs.

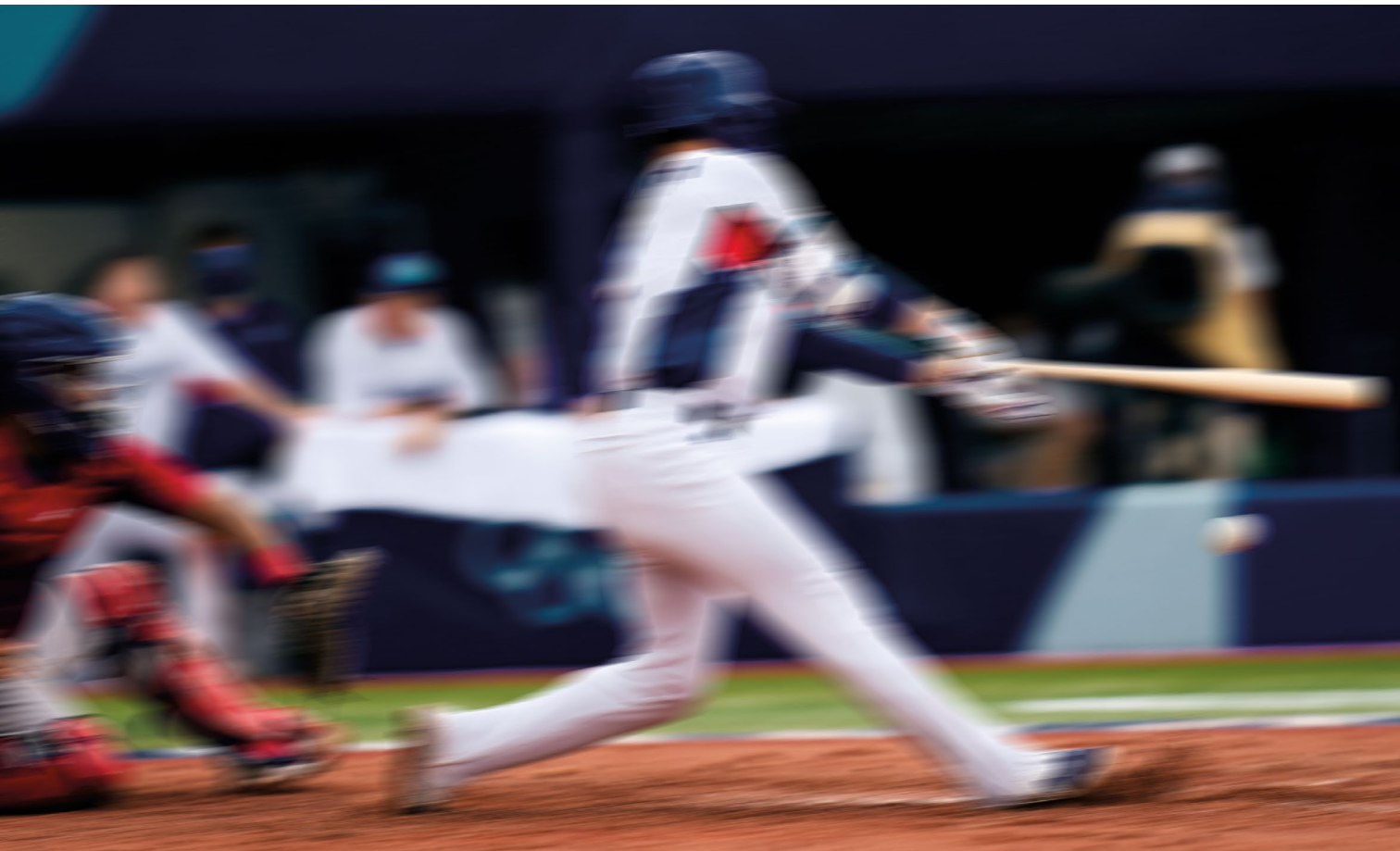
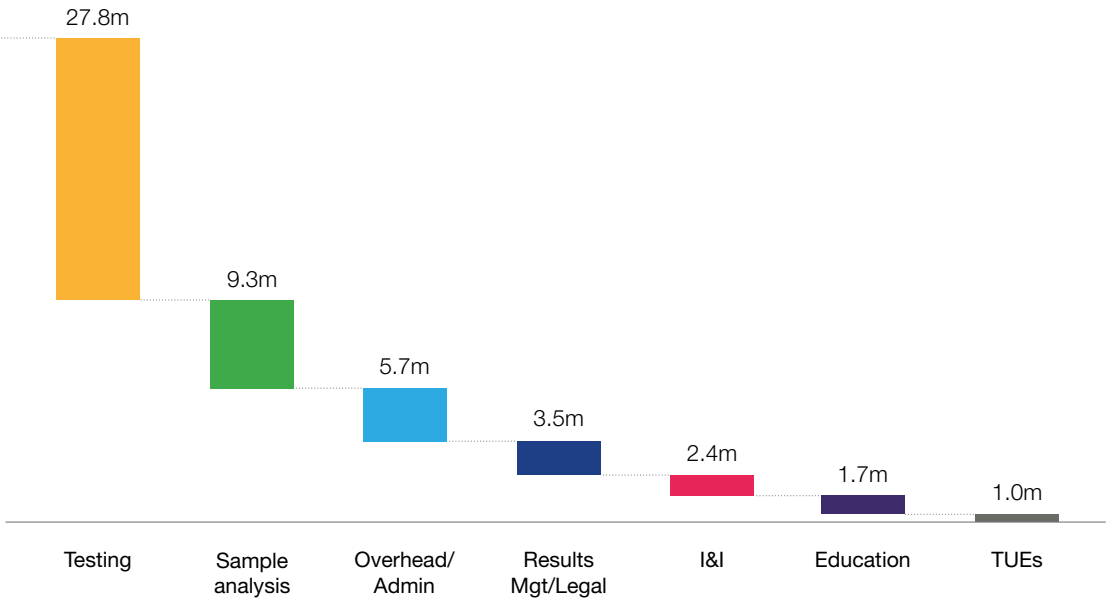


**Figure 1: IF Anti-doping expenditures annual growth 2015-22**

Compound Annual Growth Rate and budget split by programme area 2015-22, amount in USD millions

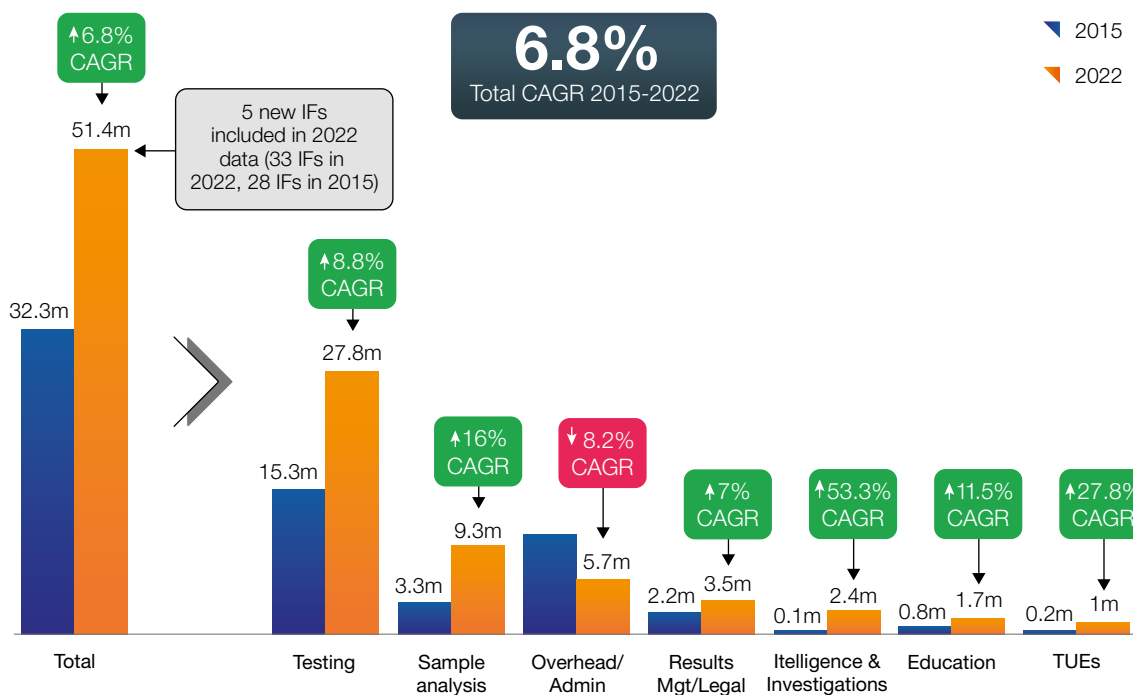


Source: 2022 figures: 2022 WADA CCQ, 2022 ITA/IF budgets, n=33; 2015 figures: International Federation Anti-Doping Processes and Expenditure Report 2016, n=28 (5 IFs not included), Inflation-adjusted (World Bank data) CAGR= Compound Annual Growth Rate



**Figure 2: IF Anti-doping expenditures annual growth 2015-22**

Compound Annual Growth Rate and expenditure increase by programme area 2015-22, amount in USD millions (2015 inflation-adjusted)



Source: 2022 figures: 2022 WADA CCQ, 2022 ITA/IF budgets, n=33; 2015 figures: International Federation Anti-Doping Processes and Expenditure Report 2016, n=28 (5 IFs not included), Inflation-adjusted (World Bank data) CAGR= Compound Annual Growth Rate

**Table 1: IF Anti-doping expenditures annual growth 2015-22**

Programme area	2015 (USD)	2022 (USD)	Variance (USD)	CAGR (%)
Testing	15.3m	27.8m	+12.4m	+8.8%
Sample analysis	3.3m	9.3m	+6m	+16.0%
Intelligence and Investigations	0.1m	2.4m	+2.3m	+53.5%
Results management/Legal	2.2m	3.5m	+1.3m	+7.0%
Education	0.8m	1.7m	+0.9m	+11.5%
Therapeutic Use Exemptions	0.2m	1m	+0.8m	+27.8%
Overhead/Administrative costs	10.4m*	5.7m	-4.7m	-8.2%
<b>TOTAL</b>	<b>32.3m</b>	<b>51.4m</b>	<b>+19m</b>	<b>+6.8%</b>

Source: 2022 WADA CCQ, 2022 ITA/IF budgets, International Federation Anti-Doping Processes and Expenditure Report 2016

\*Note: A part of testing and sample analysis costs were included in overhead/administrative costs in 2015

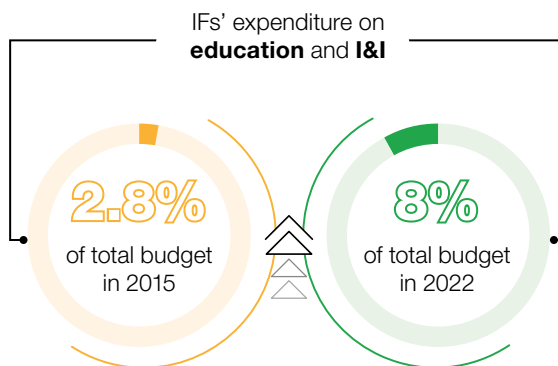
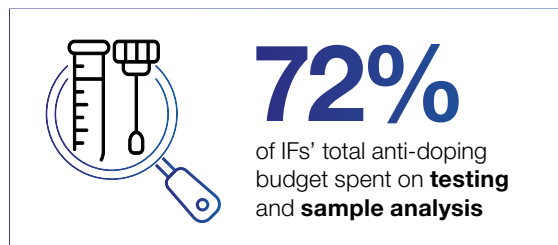




**Insight 2: Testing still dominates anti-doping investments, while increased spending for I&I and education programmes may signal a new approach**

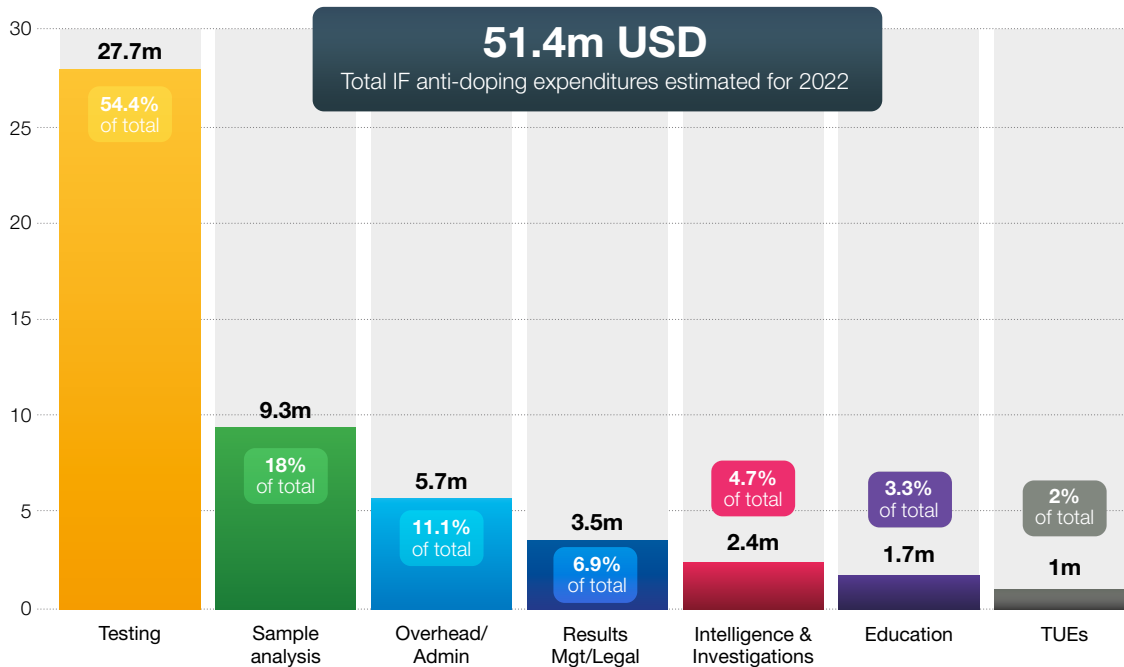
- ▼ The majority of anti-doping expenditure by IFs in 2022 was allocated to testing and sample analysis, indicating that IFs' anti-doping strategies are mostly focused on deterrence and detection. Since 2015, the share of total budget spending for both areas has increased, suggesting that IFs continue to heavily rely on testing as the primary approach to combat doping.
- ▼ The significant increase in sample analysis costs can be linked to higher laboratory expenses from the adoption of new analytical methods, as well as an increased number of testing components per sample as mandated by the latest Technical Document for Sport-Specific Analysis by WADA. Additionally, there has been a trend towards expanding out-of-competition testing, driven by intelligence-based input, which has led to an increase of samples analysed with associated costs.
- ▼ With the expansion and professionalisation of education and I&I programmes within IFs, budgets for these areas have notably grown. Following the implementation of the International Standard for Education in 2021, numerous IFs have enhanced their educational efforts to fulfil WADA requirements and address emerging issues identified through I&I activities. This trend suggests a potential cultural shift towards a more proactive anti-doping approach. However, it is worth noting that while education and I&I expenses have increased substantially, they still constitute a relatively small portion of IFs' total budgets.

- ▼ Over the past seven years, results management and legal expenses have remained consistent, reflecting the maturity of IFs' processes and legal operations. The increased spending on Therapeutic Use Exemptions (TUEs) can be primarily attributed to improvements in process systemisation, the enhancement of IT infrastructure to ensure secure storage and efficient management of TUE requests, and the outsourcing of certain aspects of the process to external service providers. Additionally, the rise in the number of processed TUEs can also be linked to recent changes in the prohibited list, leading to a higher demand for exemptions related to glucocorticoids and ADHD treatments.



**Figure 3: 2022 IF Anti-doping expenditures**

2022 IF anti-doping expenditures estimate by programme area, USD millions/Percentage of total



Source: 2022 WADA CCQ, 2022 ITA/IF AD budgets, n=33

**Table 2: 2022 IF Anti-doping expenditures**

Programme area	Amount (USD)	% of total (2022)	% of total (2015)
Testing	27.7m	54.1%	47.5%
Sample analysis	9.3m	18%	10.1%
Intelligence and Investigations	2.4m	4.7%	0.4%
Results management/Legal	3.5m	6.9%	6.8%
Education	1.7m	3.3%	2.4%
Therapeutic Use Exemptions	1m	2%	0.6%
Overhead/Administrative costs	5.7m	11.1%	32.2%
<b>TOTAL</b>	<b>51.4m</b>	<b>100%</b>	<b>100%</b>

Source: 2022 WADA CCQ, 2022 ITA/IF budgets, International Federation Anti-Doping Processes and Expenditure Report 2016

**Insight 3: Investment in promising areas of education and I&I to continue driving growth but inflation and increased requirements expected to slow down efforts**

- ▼ The majority of IFs' anti-doping personnel anticipate spending to increase in the next four years at a pace similar or higher compared to the growth rate observed from 2015-22. Reassuringly, very few IFs expect to maintain their current budgets (in terms of absolute value), and none of them plan to reduce their anti-doping budgets.
- ▼ Opinions on budget growth forecasts may be influenced by the maturity level of a specific IF's anti-doping programme. IFs with well-established and efficiently managed anti-doping programmes, whether in-house or outsourced, may be able to stabilise or slightly reduce their rates of growth as they can anticipate better forthcoming requirements. On the other hand, IFs with newly established or still suboptimal programmes may need to accelerate their budget growth, either by outsourcing more programmes areas to the ITA or by enhancing the professionalism of their internal operations.
- ▼ Survey feedback pinpointed education and I&I as the areas earmarked for increased investments in the next four years. Based on the expenditure trends observed from 2015-22, we also anticipate a faster growth rate in the future for these two prevention-focused programme areas, while the core areas of testing and sample analysis are expected to maintain a similar growth rate.



**55%**

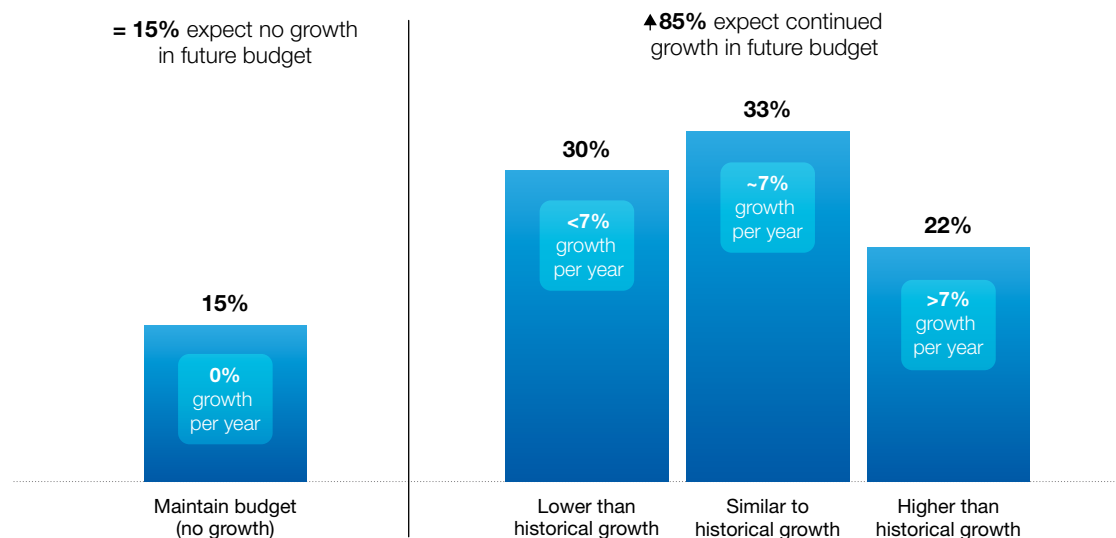
of IFs expect their anti-doping **budgets** to **grow** in the next four years at a **similar or higher** than historical growth **rate** (~7%)



**Figure 4: Anti-doping expenditure evolution in next four years**

**Question:** Compared to historical annual growth (~7%), how much would you expect your federation's anti-doping budget to change per year in the next four years?

Percentage of respondents, one budget forecast option selected per IF



Source: ASOIF 2023 Anti-doping Survey, n=27 (Don't know/Abstain excluded)

**Figure 5: Anti-doping budget change rationale**

Percentage of respondents, keywords mentioned by each IF

Please provide the rationale for future changes in IF anti-doping budget	% of respondents
Education programmes investment	27%
Increasing events	27%
WADA requirements	23%
Out-sourcing	23%
Inflation/General cost increase	23%
I&I capabilities development	23%
Increased research	9%
Increased testing	9%

Source: ASOIF 2023 Anti-doping Survey, n=22 (Optional question, Empty responses excluded)

**Insight 4: IFs tapping into external anti-doping expertise to define budgets and allocate resources accordingly**

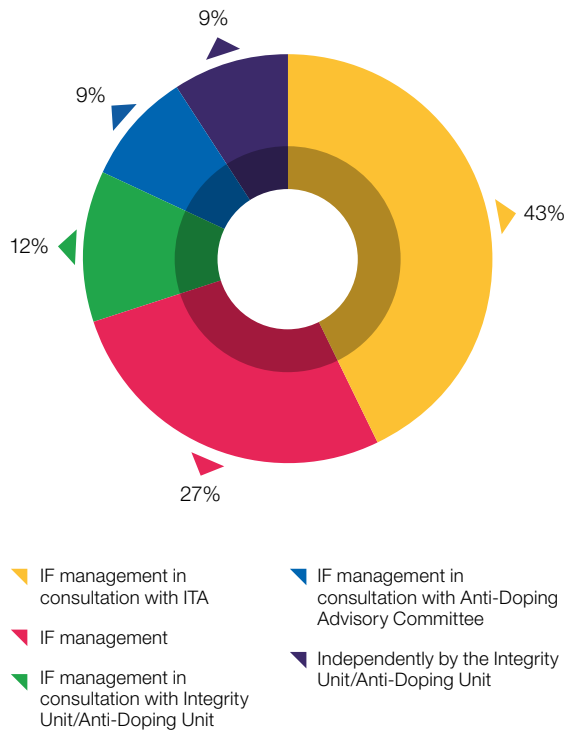
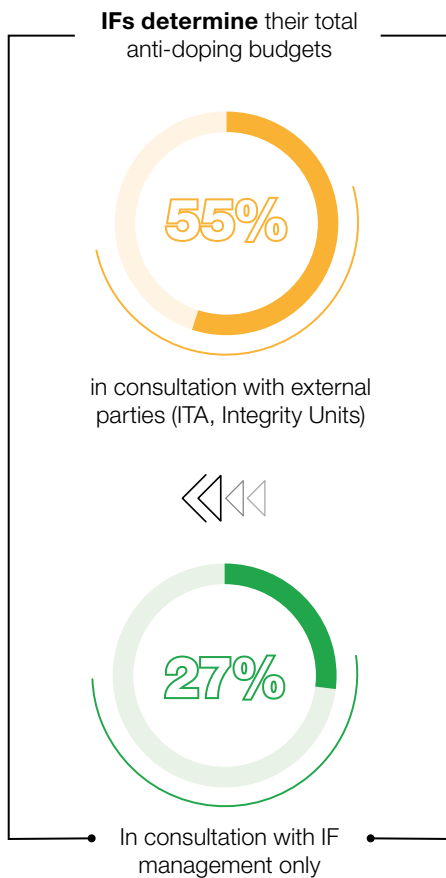
- ▼ The anti-doping budgeting process may vary depending on each IF's governance structure, financial capacity, anti-doping strategic priorities and operating model.
- ▼ The majority of IFs are now defining their annual anti-doping budget by tapping into data, intelligence and anti-doping capabilities of external entities like the ITA or their respective Integrity Units. The partial or full delegation of anti-doping programmes to these entities allowed for a new era of professionalisation through smarter, effective and transparent anti-doping budget allocation.

▼ In most cases, key anti-doping stakeholders (IFs, ITA, Integrity Units) allocate resources based on the input from a combination of independent anti-doping experts, IF leaders and finance managers. This input process ensures that budgets reflect the sport-specific know-how and anti-doping expertise required to allocate the appropriate resources where it matters most in the future.

**Figure 6: Anti-doping budget decision-making process**

**Question:** Who determines the total anti-doping budget for your federation?

Percentage of respondents, one process selected per IF





**Insight 5: IF leadership is following a diligent budgeting process with greater transparency and consistent application of criteria**

- ▼ Overall, survey responses highlight that IF management is becoming more strategic when defining anti-doping budgets and allocating resources. Only a few IFs define their budgets based on previous year figures or expected Olympic revenue contributions.
- ▼ Some 97 per cent of IFs determine their budgets by including a risk assessment to address sport-specific risks and to meet third-party requirements. Compliance with international standards, as specified by WADA, is ranked as the number one criterion when defining budget.
- ▼ Globally, IFs, with the support of external anti-doping experts, are following a consistent methodology that allows continuous evaluation of their anti-doping programmes and adjustment of budgets based on the actual sport needs and results.



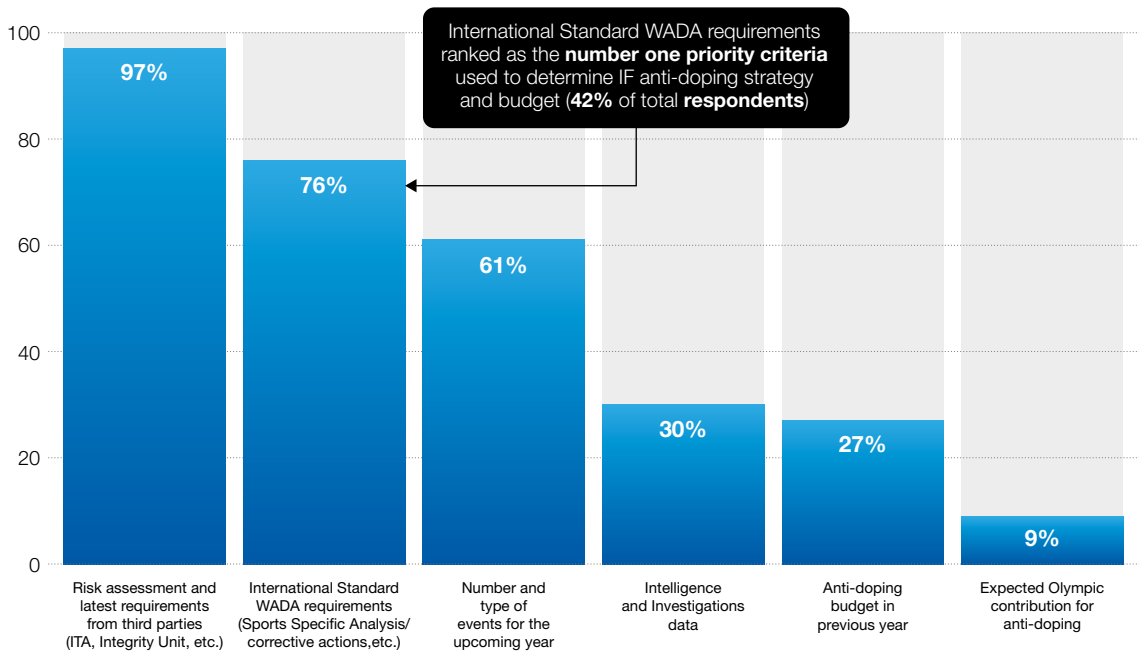
**97%**

of IFs apply a **risk assessment** and requirements from third parties (ITA, Integrity Unit) to determine their budget

**Figure 7: Anti-doping budget decision-making criteria**

**Question:** What are the most important criteria to determine your anti-doping strategy and budget?

Percentage of respondents, top-three criteria selected and ranked per IF

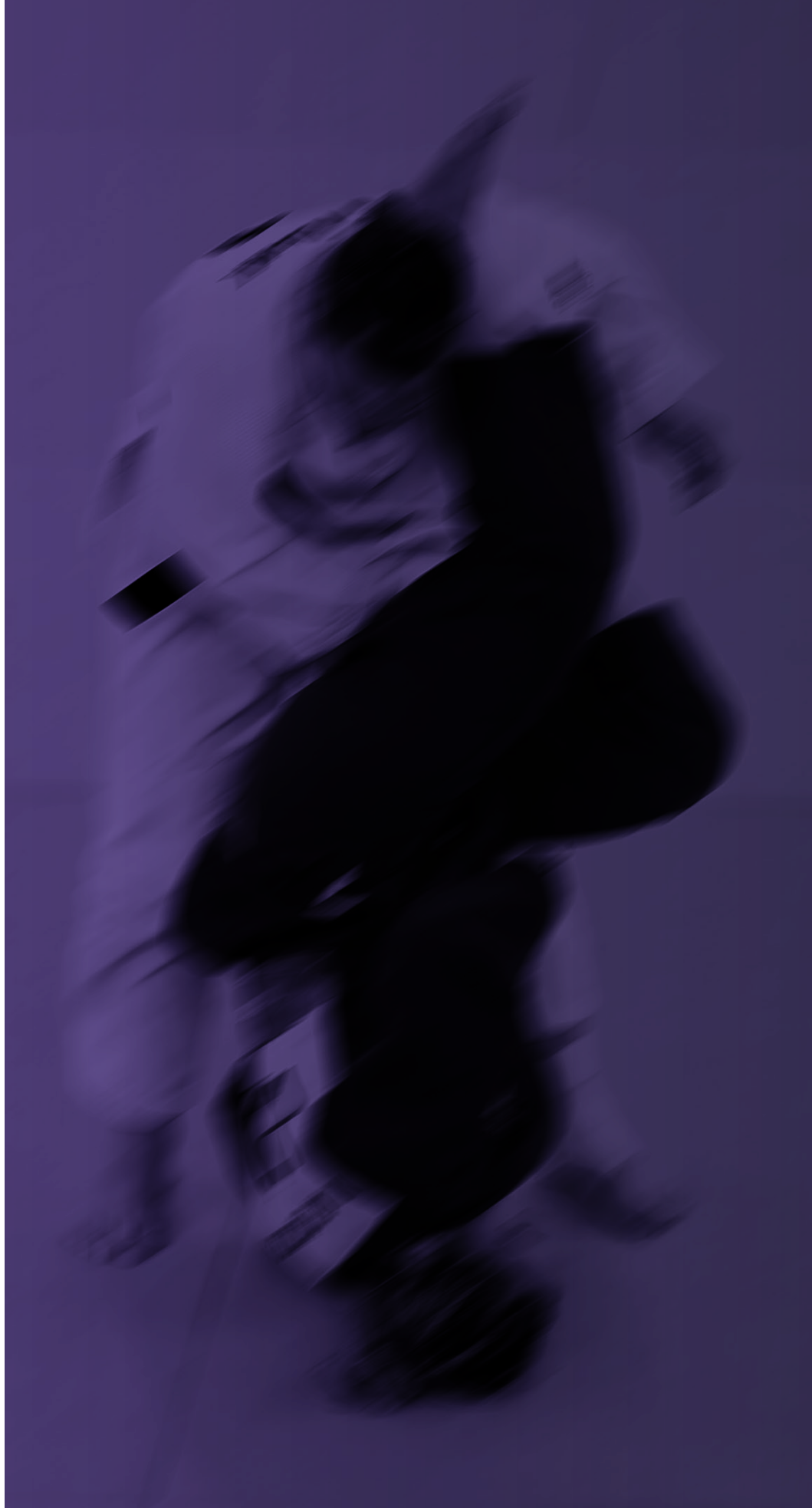


Source: ASOIF 2023 Anti-doping Survey, n=33



# 5

## Strategy and operating model

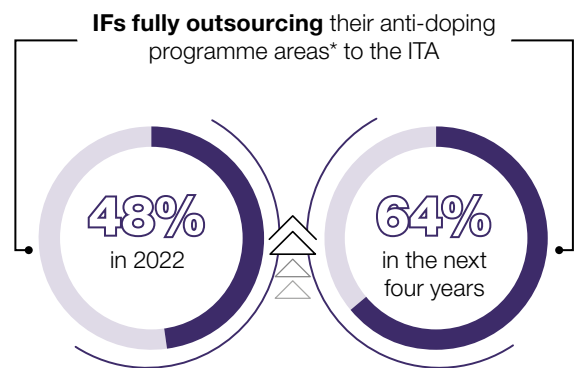




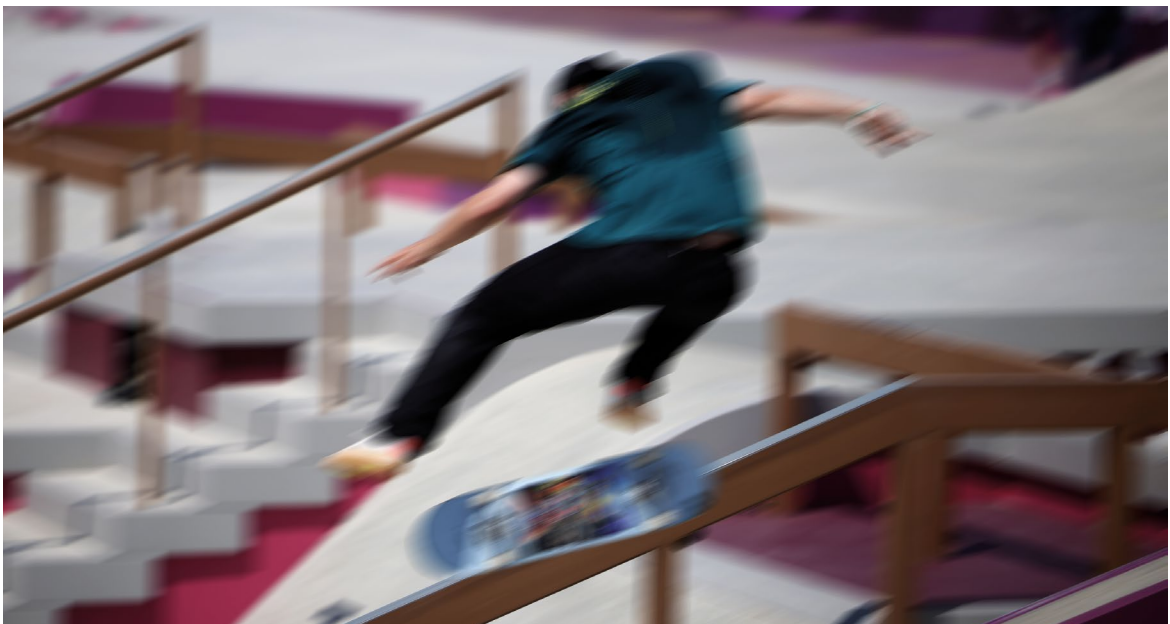
### Insight 6: ITA to increase its role in IFs' anti-doping operations over time

- In recent years, there has been a significant increase in the outsourcing of IFs' anti-doping operations to service providers like the ITA. Some IFs have also opted to enhance the independence of their anti-doping operations by establishing autonomous Integrity Units, while retaining a degree of internal control of their programmes.
- This trend is expected to continue over the next four years, with more programme areas like education and I&I being entrusted to the ITA, eventually leading to the complete out-sourcing of anti-doping operations. Although the ITA will provide increased administrative support, a notable portion of administration operations, such as results management, will still be handled in-house.

- The independence, professionalisation, and advanced capabilities of these expert entities, like the ITA and Integrity Units, are positive developments for the anti-doping community. However, it is crucial to emphasise that IFs remain solely responsible for ensuring compliance of their anti-doping programmes with the WADA Code. Accordingly, they will be required to continue carrying out the necessary controls on external providers and provide evidence to WADA.



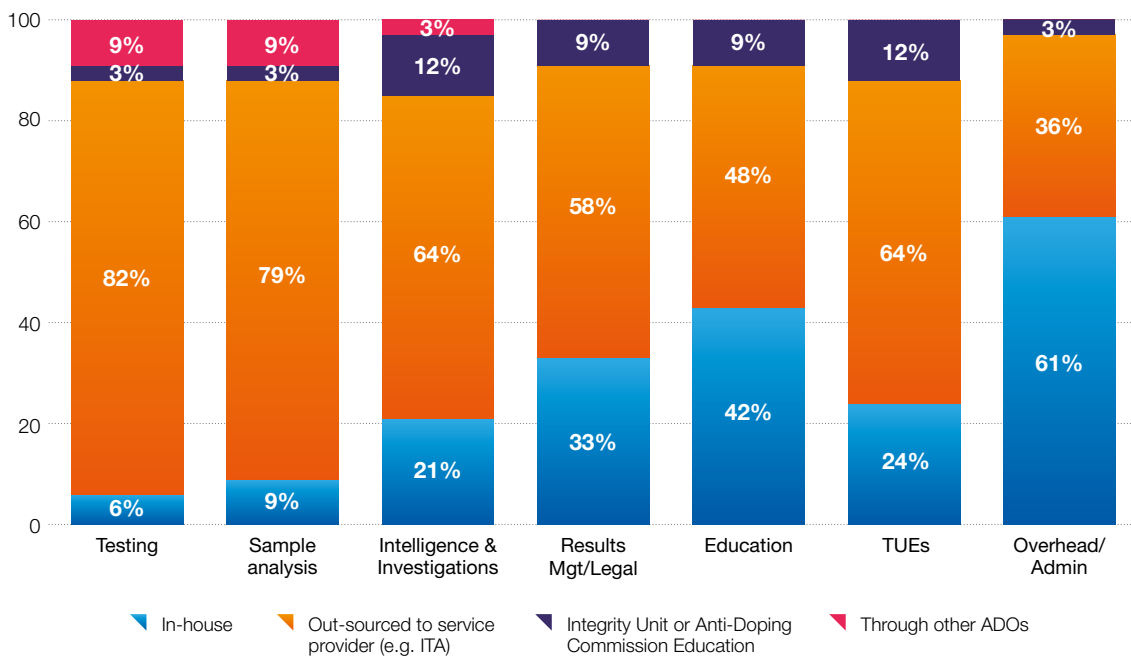
\*administrative support not included





**Figure 8: Anti-doping operating model in 2022**

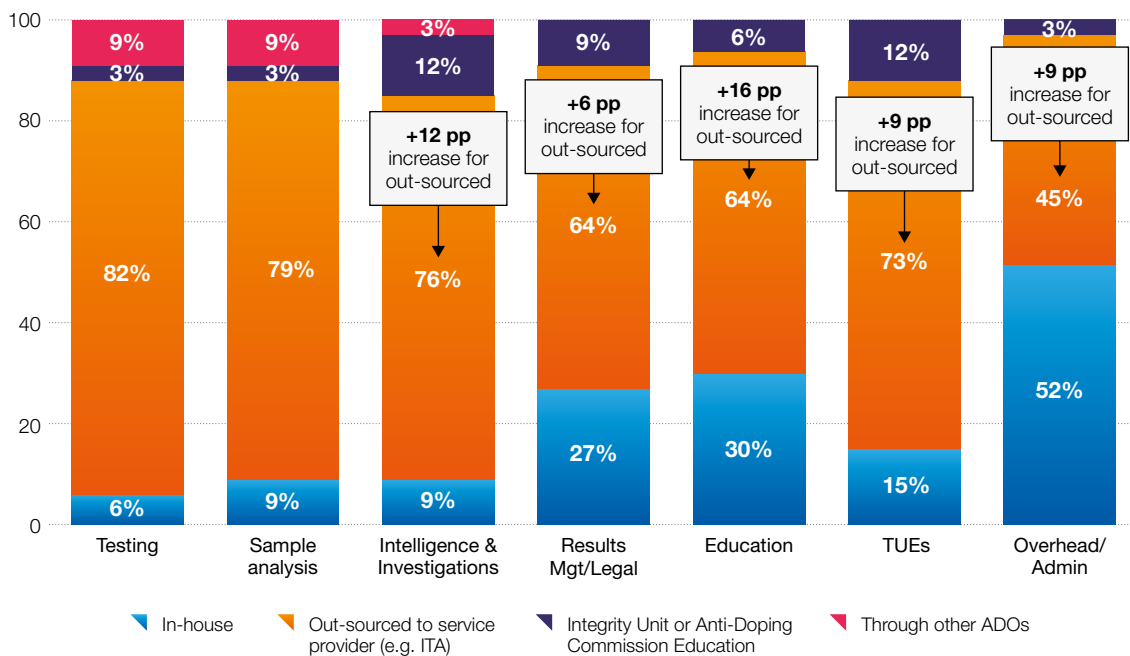
Percentage of respondents, one operating model selected for each programme area per IF



Source: ASOIF 2023 Anti-doping Survey, n=33

**Figure 9: Anti-doping operating model in next four years**

Percentage of respondents, one operating model selected for each programme area per IF

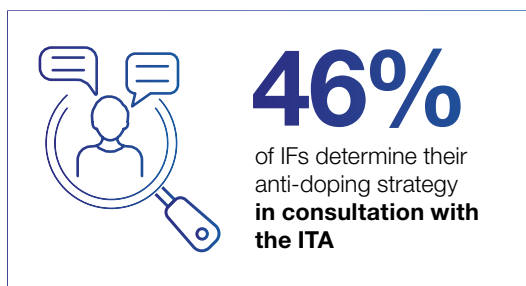


Source: ASOIF 2023 Anti-doping Survey, n=33; pp=percentage points

### Insight 7: A collaborative approach to develop IFs' anti-doping strategies

- With the creation of the ITA, a large majority of IFs have placed a high level of trust in its independence and expertise in developing effective anti-doping strategies. Integrity Units, typically independent organisations established and funded by an IF, also have significant autonomy to develop and execute anti-doping strategies with a limited degree of consultation with IF management.
- The ITA is expected to continue having a significant influence on developing IFs' anti-doping strategies, even without much input from IF leadership. However, it is essential for IFs to stay engaged with the ITA to develop effective strategies notably

for aspects such as target-testing, given the expert knowledge of a sport lies within the IFs. The same can be said for IFs that continue to work with their independent units.

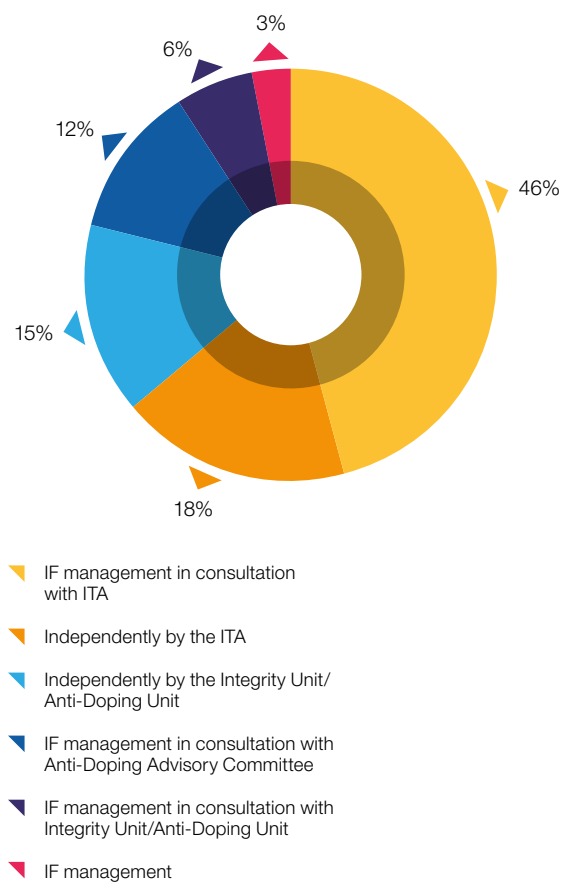




**Figure 10: Anti-doping strategy process definition**

**Question:** Who determines the anti-doping strategy for your federation?

Percentage of respondents, one option selected per IF



Source: ASOIF 2023 Anti-doping Survey, n=33



**Executive point of view – Benjamin Cohen,  
Director General, International Testing Agency**

**From more testing to smarter testing**

Global anti-doping efforts show a transition from conventional testing methods towards more effective, informed and intelligence-led testing strategies. This progressive shift carries important weight as it aims to optimise anti-doping programmes through the integration of intelligence-driven data analytics that combine large datasets to better inform the decision-making process. This is why the ITA will continue to invest in new technologies and the development of digital tools to improve the ability of IFs and major event organisers to understand new patterns, connect data and be more effective altogether in the fight against doping.

Intelligence-led testing strategies rely on a dynamic range of factors, such as inherent risks, an athlete's and their respective sport's physiology, the timing and location of tests, athletic performance, educational background, ongoing investigations on rule violations and more. This comprehensive approach, harnessing the power of data integration and automation, allows for more focused testing plans. In addition, by embracing intelligence-led and data-driven approaches, new opportunities will emerge such as the identification of trends and emerging patterns, the mitigation of possible bias and ultimately a more effective allocation of resources by international sport organisations.

As we navigate this evolving landscape, it is crucial to adopt more data-driven and risk-based approaches, while also keeping ethical considerations at the forefront. Indeed, ensuring athletes' privacy and data security remains paramount. The use of technology must be guided by principles that uphold fairness and maintain trust within the sporting community and the anti-doping system.



# Anti-doping ecosystem and stakeholder engagement



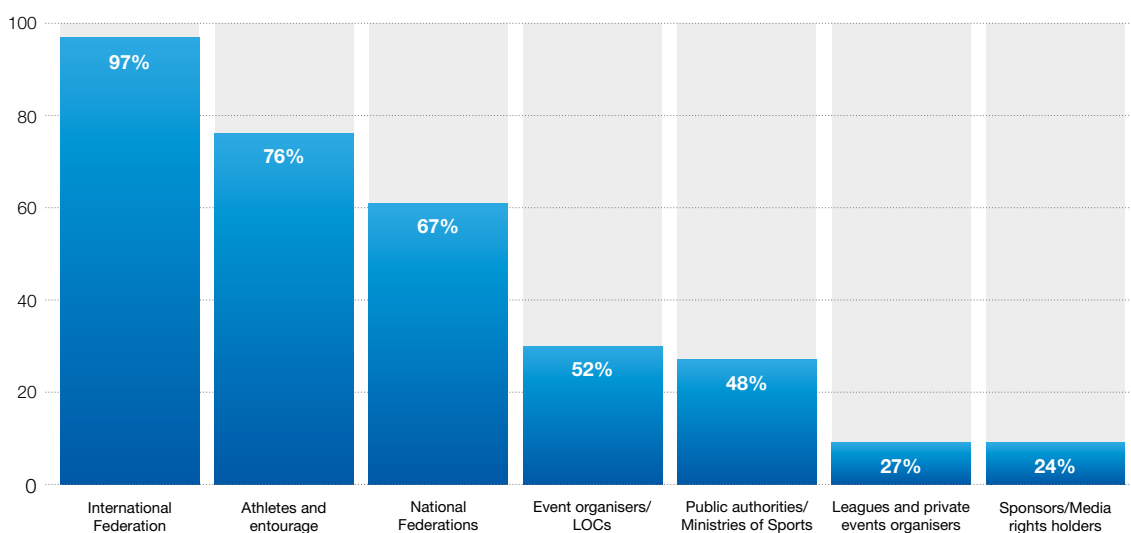
**Insight 8: IFs and athletes are more aware of the importance of anti-doping yet public authorities and commercial organisations are seemingly lagging behind**

- ▼ Nearly all respondents are confident that IFs are well-aware of the detrimental effects doping can have on their respective sport's reputation and recognise the importance of implementing robust anti-doping measures to maintain the sport's integrity. Furthermore, they believe the education programmes implemented by IFs and National Federations (NFs) have significantly contributed to athletes' and their entourages' understanding of integrity, athletes' health and their future careers.
- ▼ IF and NF Local Organising Committees (LOCs) are not as involved in regulations and decision-making, hence are perceived as placing less importance on anti-doping. This highlights the need for better communication and education about anti-doping principles between the local authorities and the respective NFs and LOCs.
- ▼ Public authorities and ministries of sport are perceived by IFs as having limited understanding of the critical role of anti-doping in maintaining the integrity of sport for the fans and general public. Commercially driven sports organisations (private leagues) and sponsors/media seem to underestimate the threat of doping to the reputation of their properties and investments. In both cases, further engagement, education and advocacy efforts are on the agenda to raise better understanding and engagement in anti-doping initiatives.

**Figure 11: Stakeholders' understanding of anti-doping**

**Question:** How well do you think the following stakeholders in your sport understand the importance of anti-doping to the integrity and credibility of your sport?

Percentage of respondents, top-two options selected ('Above average' and 'Very good')



Source: ASOIF 2023 Anti-doping Survey, n=33

**Insight 9: New stakeholder engagement strategies aim to highlight the urgency of the fight against doping**

- ▼ Most respondents believe that emphasising the negative consequences of doping, such as damaged credibility and lack of public trust, is likely to encourage stakeholders to take action and support anti-doping initiatives. Additionally, highlighting the physical dangers on athletes' health and potentially ruining careers can enhance stakeholders' understanding of the importance of maintaining clean and fair sporting environments.
- ▼ Demonstrating the effectiveness of I&I in uncovering doping cases is crucial for building confidence in the existing anti-doping intelligence systems, encouraging stakeholders' investment and providing evidence to relevant authorities.

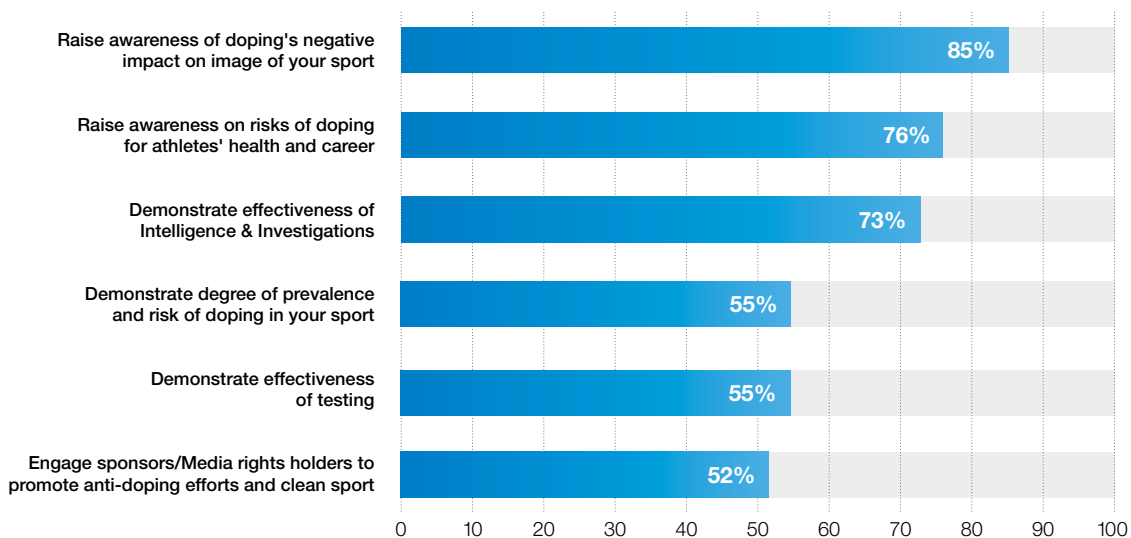
In contrast, testing's effectiveness has lower mobilisation potential, due to scepticism among IFs regarding their return on investment.

- ▼ Opinions among IFs regarding the use of doping prevalence statistics in their respective sports are divided. This division could be due to concerns about the substantial risks involved, which could potentially harm their sports' reputations and the commercial value of their athletes. However, it is worth noting that measuring prevalence and associated risks of doping in different sports has the potential to enhance the allocation of anti-doping resources more effectively. This approach allows for targeted resource allocation based on various criteria, such as the specific sport, country or age group. Furthermore, it can provide the evidence necessary to garner increased support from stakeholders.

**Figure 12: Stakeholder engagement strategies**

**Question:** What would contribute to increasing stakeholders' awareness and support in the fight against doping for your sport?

Percentage of respondents, top-two options selected ('Strong contribution' and 'Very strong contribution')



Source: ASOIF 2023 Anti-doping Survey, n=33





### **Deep Dive: Enhancing stakeholders' awareness and support for anti-doping**

Doping is a global issue, impacting sports at various levels, from international competitions to amateur and youth events. With increasing financial benefits associated with high performance and winning in elite sports, the use of performance-enhancing substances has evolved into a multifaceted concern covering medical, ethical, legal, and social issues for athletes and sports organisations.

There are numerous well-documented reports on the detrimental effects associated with doping, influencing a diverse range of players within the sporting ecosystem<sup>1</sup>. However, are these consequences sufficient to dissuade athletes and their entourages from engaging in doping practices? Furthermore, can they rally stakeholders to invest more resources and advocate for clean sport?

### **Impact of doping on athletes and entourages**

The negative repercussions of doping on athletes and their entourages, including harmful effects on mental and physical health, financial losses and permanent damage to reputations and relationships are extensively substantiated through online resources and education programmes provided by organisations such as WADA, IFs, NADOs and other ADOs. These education initiatives, which thoroughly document the risks doping poses to athletes' health and careers, have allowed for significant progress in this key area. This progress is supported through comprehensive research<sup>2</sup> on the health effects of specific substances, as well as objective analysis of the financial and societal damages incurred.

However, from the athletes' perspective, the decision to employ performance-enhancing drugs hinges upon various factors, including individual culture, age, family status, financial conditions, and general environment. Understanding this behaviour and developing appropriate response mechanisms remains a challenge. Although education programmes have significantly helped inform athletes and their entourages on the general risks, there is room for improvement in understanding athletes' doping behaviour patterns and providing tailored response methodologies.

<sup>1</sup> Consequences of doping, European Olympic Committees, <https://www.eurolympic.org/clean-sport/consequences-of-doping/>

The consequences of doping, Drug Free Sport New Zealand, <https://drugfreesport.org.nz/substances/the-consequences-of-doping/>

<sup>2</sup> Health effects of Doping, Sport Integrity Australia, <https://www.sportintegrity.gov.au/what-we-do/education/health-effects-of-doping>

Effects of Performance-Enhancing Drugs, USADA, <https://www.usada.org/athletes/substances/effects-of-performance-enhancing-drugs/>

### **Impact of doping on IFs and institutional stakeholders**

Doping not only harms individuals but also undermines the integrity of sports and their broader role in society. High-profile doping cases call into question the legitimacy of sporting competitions, erode trust in sports institutions, and promote a “win-at-all-costs” mentality across all levels of sport. However, research into the broader societal and sports-related negative impacts of doping is relatively limited, primarily due to the lack of social research data. Considering the substantial financial stakes involved in professional sports and the profound societal influence of sports, this data-deficit is cause for concern. Institutions responsible for clean and competitive sports face challenges in implementing the right combination of regulations and advocacy.

For instance, there is limited information suggesting that doping in elite sports has inadvertently given rise to a burgeoning market for performance-enhancing substances that are now infiltrating schools, fitness clubs, and youth and amateur competitions worldwide. In some cases, the same drugs used by professional athletes have been adopted by recreational athletes of various ages who are unaware of the associated health risks.

If more empirical evidence can substantiate the aforementioned arguments, public authorities could collaborate with IFs to develop education, prevention, and treatment programmes tailored to these vulnerable athletes, effectively curbing perilous behaviours.

### **The role of doping prevalence in anti-doping awareness and support**

Accurately measuring doping prevalence across sports, countries and age groups, while understanding athletes’ motivations, has long posed a challenge. Current knowledge relies on diverse evidence, methods and populations, hindering sport federations’ ability to assess doping extent and the effectiveness of anti-doping strategies. However, increased resources from stakeholders like WADA and researchers offer hope for better measurement and customisation of anti-doping strategies, enhancing awareness and securing future support and funding.





**Executive point of view – Olivier Niggli,  
Director General, World Anti-Doping Agency**

**Raising awareness and stakeholder support  
for anti-doping**

It is encouraging to see that there is a perception among IFs that the majority of their stakeholders and athletes understand the importance of anti-doping to the integrity and credibility of their sport; however, it is less encouraging that it is perceived that public authorities are not as engaged. This highlights the need for building greater awareness and unity in the global collaborative mission for doping-free sport.

WADA regularly engages and works hand-in-hand with IFs and other bodies, such as the ITA, that regulate and promote sport around the world. Together, we raise awareness around the positive impact of doping-free sport through such activities as our Outreach Programme that, since 2001, has been engaging athletes and support personnel at major events as part of the solution to keeping sport clean. WADA also runs an annual 'Play True Day' campaign that, in 2023, had a potential reach of over 161 million people worldwide and generated nearly 160,000 social media engagements.

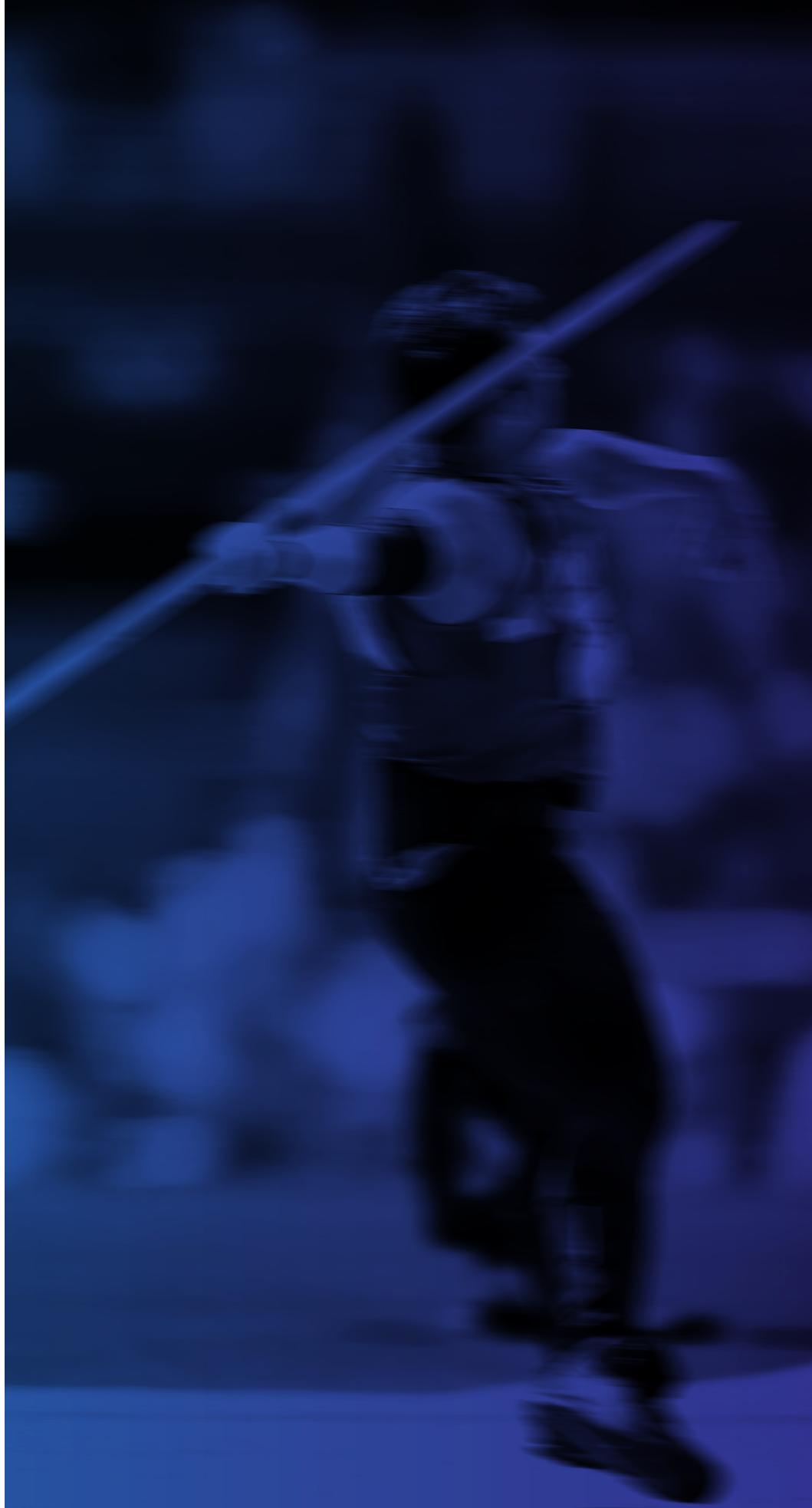
Since 2020, WADA has prioritised efforts in athlete engagement and education. One of the most impactful developments has been the entry of the first International Standard for Education. As a result, education is now expected to be a core component of all IF anti-doping programmes.

As it relates to education, we are also expanding the I&I capabilities of ADOs through innovative and expert-led education programmes connected to WADA's European Union-funded Project, which was awarded in June 2022. Among other things, the I&I-led project is improving understanding among law enforcement about how anti-doping investigations work and strengthening communication between those conducting them and ADOs.

The anti-doping landscape has evolved significantly in recent years. We are pleased to say that these types of initiatives we undertake in collaboration with the sport movement are proving successful in increasing awareness and coordinating efforts towards a world of doping-free sport.



# Future state of anti-doping



### Insight 10: Education becomes a key priority for doping prevention but testing remains core for IFs' anti-doping strategies

▼ Nearly all respondents consider education as a top priority in the next four years, reflecting a more proactive approach to preventing doping violations. By prioritising education, IFs can empower individuals with knowledge and resources to make informed decisions, fostering a culture of clean sport and deterring doping behaviours before they happen. Future developments in the field of education could potentially result in enhanced cooperation and cost-sharing between IFs and ADOs for educational programmes to offset expenses. These trends may also result in the introduction of novel methods for delivering curriculum more efficiently to a wider range of athletes, and potentially help extend programme implementation beyond sports competitions,

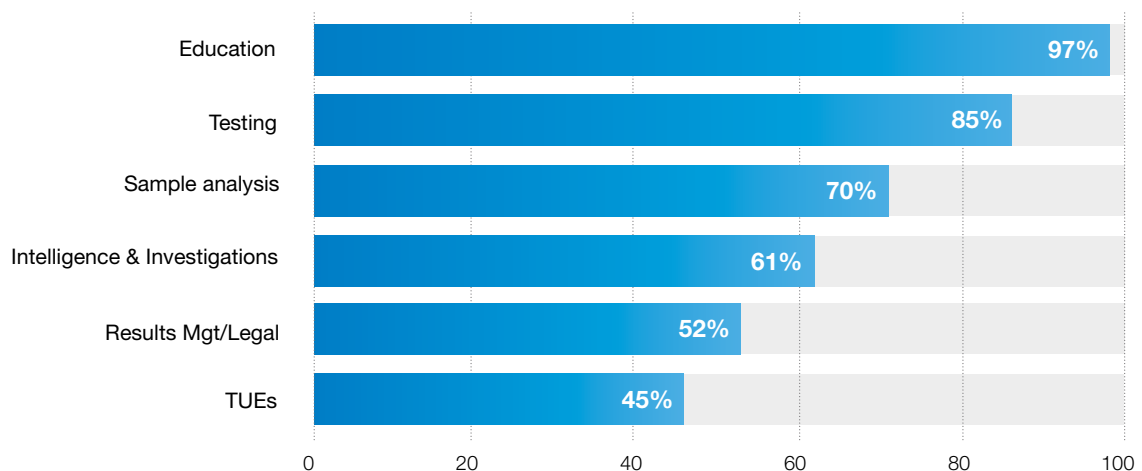
including initiatives at primary-school level or in local youth sports. Testing and sample analysis remain a core priority for most IFs, indicating a clear commitment to continue investing in regular and comprehensive testing programmes as a key means to actively deter and detect doping violations. Adequate resources and advancements in sample analysis techniques are also considered necessary to maintain the effectiveness of testing efforts.

▼ A significant portion of respondents considers I&I as a future priority, potentially a critical tool for staying ahead of emerging doping trends, by proactively targeting doping offenders and disrupting doping practices. Finally, programme areas like results management and TUEs are further down the IFs' priority list, since most IFs already have well-established operations with limited potential for significant enhancements.

**Figure 13: Future IF priorities**

**Question:** In the next four years, which anti-doping programme areas do you plan to prioritise?

Percentage of respondents, top-two options selected ('High priority' and 'Essential priority')



Source: ASOIF 2023 Anti-doping Survey, n=33



**Executive point of view – Karen Moorhouse,  
Chief Executive Officer, International Tennis  
Integrity Agency**

**Measuring the impact of education**

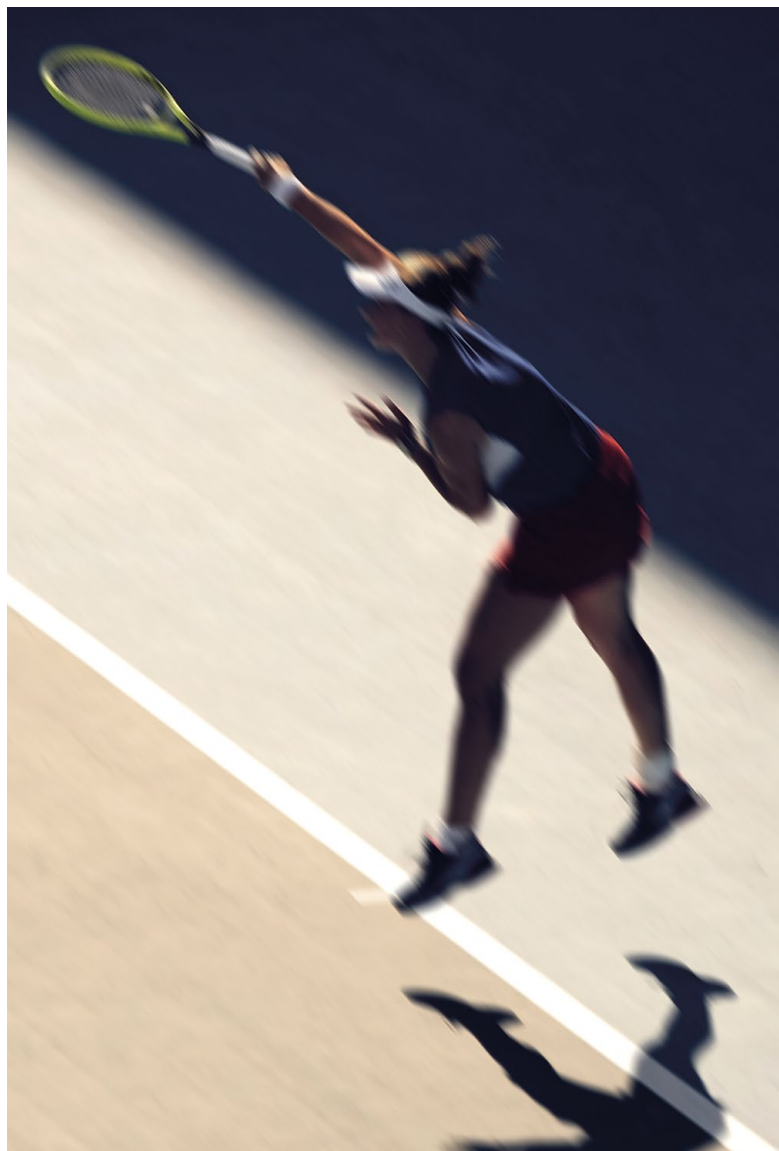
The ITIA has placed a strategic focus on prevention and is committed to working with our seven tennis members to deliver the most impactful and effective integrated anti-corruption and anti-doping education programme.

The ITIA utilises a blended learning model, which prioritises face-to-face delivery reinforced by mandatory online education. Players are only eligible to enter tour-level events once they have completed the online Tennis Integrity Protection Programme (TIPP) which is delivered to 18,000 professional registered players and will extend to 30,000 junior players from 2024.

Measuring the impact of any prevention work is always a challenge; however, we are committed to continuous monitoring and evaluation of our programme. In 2022 we delivered education face-to-face to 1,892 players and other participants, and 2023 is on course to exceed the preceding year by approximately 85 per cent.

We assess the scope and reach of our programme, recording the players we educate and their rankings, nationalities and ages to assess the most effective points of intervention along the player pathway. For example, in 2023 the ITIA has delivered education to 73 per cent of junior players ahead of their first anti-doping tests, and 87 per cent had completed our online education. From 2024, the figure will increase to 100 per cent by virtue of our new junior mandate.

Beyond the numbers, we are beginning the process of tracking and analysing understanding, sentiment, attitudes and behaviours over time, as we believe these to be the most effective measures of our impact.



To this end, we launched our inaugural player survey this year to better understand the attitudes, perceptions and challenges from within the locker room. We have built feedback modules into our online education and will analyse levels of understanding in response to targeted questions. As well as hoping to see a reduction in inadvertent doping, we will also be exploring how we measure the positive interventions and behaviours.

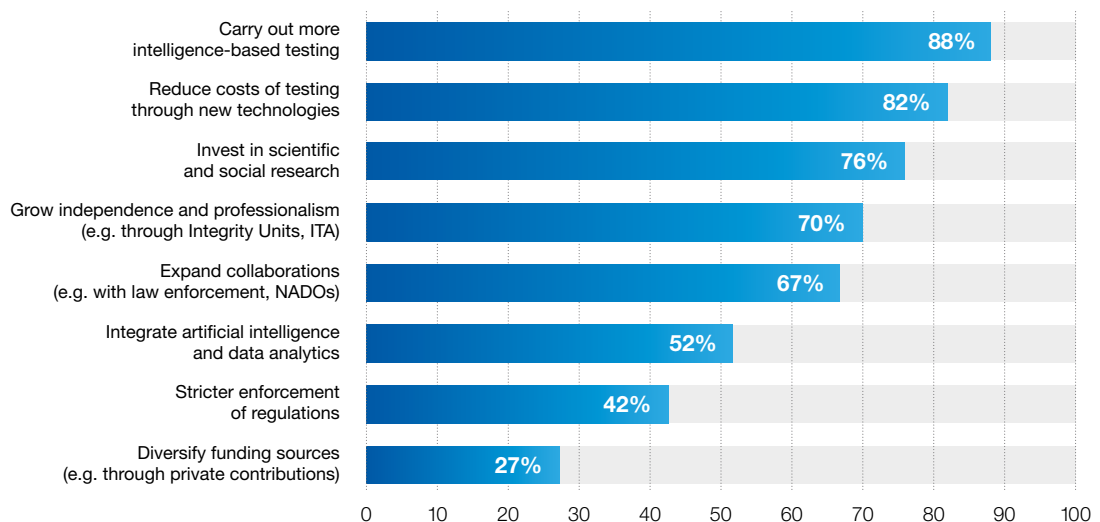
### Insight 11: Are IFs inclined to adopt innovative methods to prevent doping and to manage their investments proactively in the future?

- ▼ According to IFs, the adoption of intelligence-led testing holds the greatest potential to enhance the impact of anti-doping efforts. By utilising intelligence and data analysis to target individuals or groups based on suspicious activities or patterns, the efficiency of testing can be improved, resulting in a higher likelihood of detecting doping violations. Additionally, reducing testing costs and potentially increasing testing volumes can be achieved through the development and implementation of innovative testing methods and process automation, or the utilisation of portable and cost-effective testing devices.
- ▼ IFs believe that scientific and social research present a significant opportunity in the future; enhancing anti-doping research may help detect new substances and doping methods, gain insights into the social dynamics surrounding doping, and develop effective prevention and education strategies. In contrast,
- ▼ As anti-doping efforts face increasing exposure to external influences, IFs foresee an ongoing commitment to enhancing the independence and professionalism of anti-doping organisations and personnel, thereby pursuing a positive trajectory. The delegation of more programme areas to the ITA and Integrity Units is projected to foster greater specialisation among personnel in the anti-doping field, while simultaneously promoting transparency and reducing conflicts of interest in the reporting of impact, data availability and analysis.
- ▼ Additionally, respondents believe that expanding collaborations, such as partnerships with law enforcement agencies or NADOs, presents a significant opportunity to improve information sharing, harmonise approaches, and strengthen IFs' overall anti-doping endeavours.

### Figure 14: Future opportunities

**Question:** In the next four years, which of the below opportunities do you expect to have the greatest impact?

Percentage of respondents, top-two options selected ('Strong impact' and 'Very strong impact')



Source: ASOIF 2023 Anti-doping Survey, n=33

**Insight 12: Anti-doping personnel are concerned about keeping pace with rapid technological developments in athletic performance and doping, while operating with limited resources**

▼ The top-three future threats selected by respondents relate to ongoing challenges of anti-doping that are beyond the control of sport federations. For example, the push to increase athletic performance to new limits, combined with advancements in science and technology, can lead to further developments of undetectable substances or methods that are yet unknown to regulators. Addressing this threat would require constant monitoring, research, and innovation from the entire anti-doping community.

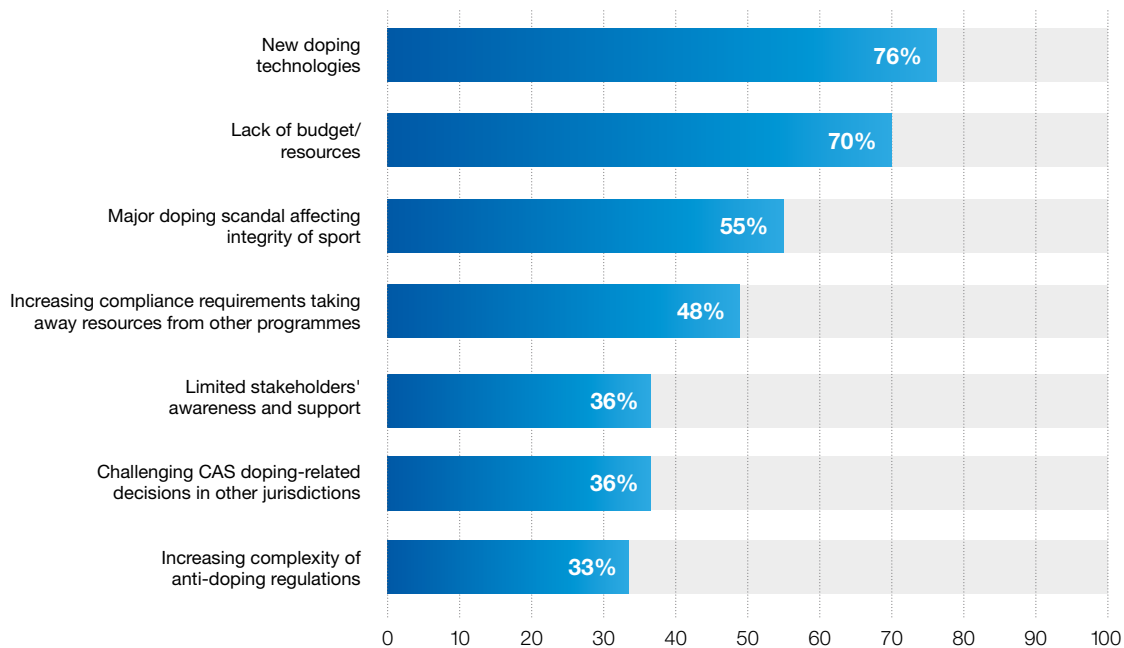
▼ A significant concern relates to the limited availability of budgets and resources that can hinder IFs’ ability to implement comprehensive anti-doping programmes and initiatives. Increasing costs for effective testing, research, education, intelligence-gathering, and enforcement activities will be a major challenge, particularly for smaller IFs that may be dependent on third-party contributions.

▼ A major doping scandal is an inherent risk to the integrity of IFs, reducing public trust and damaging the reputation of sports and athletes. Although there is no obvious method to anticipate a new doping scandal, history has shown that major doping cases in the past have provided the impetus for action in the field of anti-doping.

**Figure 15: Future threats**

**Question:** In the next four years, which of the below threats do you expect to have the greatest impact?

Percentage of respondents, top-two options selected (‘Strong impact’ and ‘Very strong impact’)




Source: ASOIF 2023 Anti-doping Survey, n=33





**Insight 13: Are IFs confident in their ability to embrace future opportunities and challenges?**

- ▼ Based on the survey results, the majority of respondents expressed confidence in their ability to handle future opportunities and threats. This confidence can be attributed to the growing professionalisation within the anti-doping field and the investment in emerging areas, which are expected to yield positive outcomes in the near future, such as smarter testing, I&I and education.
- ▼ As seen from the previous questions, most anti-doping personnel demonstrate a good understanding of the key challenges that lie ahead and feel well-prepared to effectively respond within their respective areas of responsibility.
- ▼ Nevertheless, since anti-doping inherently involves reacting to doping, there will be “unknown risks” that arise from major scandals or new doping technologies, stemming from the ongoing pursuit of peak human performance. To stay ahead of these risks, it is vital for IFs to continue to innovate and actively engage with athletes and their entourages.



# 84%

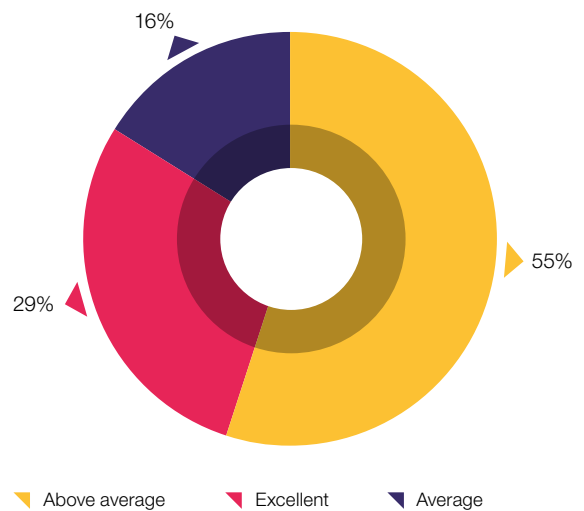
of IFs believe they are **well prepared** to tackle **future opportunities** and **threats** in the next four years\*

\* Above average and excellent

**Figure 16: IF preparedness level**

**Question:** In the next four years, how do you assess the level of preparedness of your federation to effectively deal with future opportunities and threats?

Percentage of respondents, one option selected per IF



Source: ASOIF 2023 Anti-doping Survey, n=31 (Don't know/ Abstain excluded)



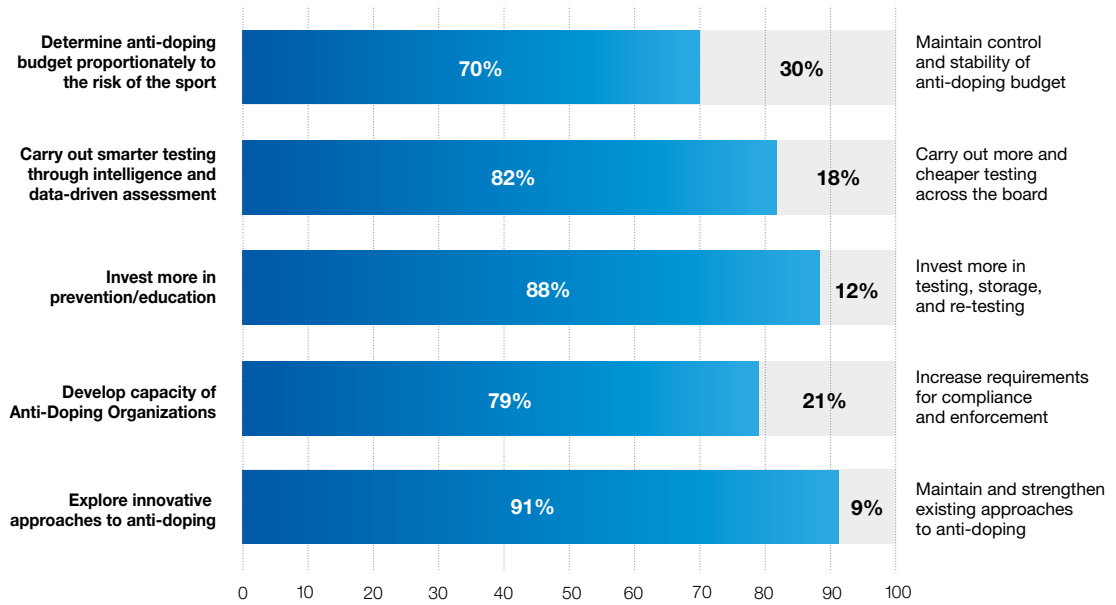
#### **Insight 14: Are IFs poised to take a more proactive stance in their anti-doping strategies and investments?**

- ▼ Confronted with a hypothetical series of trade-off questions in the survey, IFs were compelled to make difficult choices based on assumed limitations of budget and resources.
- ▼ The respondents' preferences to determine future budgets based on the risk associated with each sport has the potential to pave the way for broad implementation of new risk assessment methodologies, like measuring doping prevalence. These methodologies could provide transparent and unbiased data to achieve more effective budget allocations and enhanced funding for each sport.
- ▼ Intelligent data-driven testing, previously identified as the foremost opportunity in the future, is also extensively favoured as a testing approach. This suggests that numerous IFs may bolster their intelligence and data capabilities to target testing efforts effectively in the future, rather than simply expanding the scale and range of their testing programmes.
- ▼ An overwhelming majority of IFs believe that investing more in prevention/education in the future is essential, reflecting their scepticism about the effectiveness of the substantial investments in testing and their readiness to adopt a more proactive approach in combating doping moving forward.
- ▼ By investing in capacity development of ADOs, most IFs may seek to enhance the overall capabilities, technology and infrastructure of the ecosystem, leading to more strategic and targeted anti-doping efforts.
- ▼ Finally, the overwhelming preference of IFs to pursue new anti-doping approaches unequivocally demonstrates that anti-doping personnel are committed to investing extra resources, time, and efforts into proactive and innovative ideas for combating doping, moving away from conventional methods and processes.

**Figure 17: IF trade-off selections**

**Question:** Facing the following hypothetical trade-offs, what do you think the priorities should be to improve the effectiveness of the anti-doping ecosystem going forward?

Percentage of respondents, one option selected per IF for each trade-off



Source: ASOIF 2023 Anti-doping Survey, n=33



# 8

## Methodology



## Financial analysis

The financial analysis was conducted in the northern hemisphere spring of 2023, utilising 2022 expenditure estimates for 33 ASOIF member federations in US Dollars (USD).

The sources of the financial analysis were:

- ▼ Aggregated IF 2022 budget data submitted by IFs in the 2022 WADA Code Compliance Questionnaire (CCQ) (28 IFs).
- ▼ Aggregated IF 2022 budget data from the ITA, for IFs that outsource parts of their anti-doping programme to the ITA (23 IFs).
- ▼ IF 2022 budget data provided directly from IFs that have neither submitted WADA CCQ nor outsource to the ITA (five IFs).

For the purposes of the financial analysis, we have validated the budget data by comparing the various sources and conducting one-to-one discussions with WADA, the ITA and a number of IFs to ensure consistency and accuracy.

The validated data was aggregated to present a financial overview across the 33 IFs focusing on seven programme areas most commonly used by ADOs. The financial analysis is complemented by a comparison of historical data from our 2016 report (utilising 2015 financial data at nominal and inflation-adjusted values) to outline the evolution in anti-doping spending of IFs.



**Table 3: Anti-doping programme areas**

Programme area	Definition
▼ Testing	Testing is the most common anti-doping method. It aims to have a deterrent effect to those vulnerable to a doping decision and to detect those who chose to take a banned doping substance. Testing can take place in-competition at events, or out-of-competition, in training venues, or even at an athlete's home. An athlete can be tested by relevant NADOs, IFs and Major Event Organisations. There are currently three types of anti-doping test: urine, venous blood and dried blood spot.
▼ Sample analysis	Sample analysis is an extension/continuation of the testing process. Once a testing sample is collected, it is secured and sent to a WADA-accredited laboratory for analysis. A blood sample collected as part of the ABP programme may be analysed by a WADA-approved laboratory. The laboratory copy of the Doping Control Form that accompanies the sample is anonymised, indicating only the sample bottle number, sport and the athlete's gender. Lab results of the sample analysis are then communicated to the respective IF or third-party managing the IF's anti-doping programme.
▼ Intelligence and Investigations	I&I is a relatively novel method to detect doping in sport and aims to conduct investigations, collect relevant intelligence from a wide range of sources (including athletes/entourages), collaborate with law enforcement agencies and protect whistleblowers. The 2015 World Anti-Doping Code first established an intelligence-led approach to anti-doping that encourages a holistic understanding of doping to detect, deter and prevent early in the supply chain. More and more IFs have established dedicated I&I units and use intelligence to develop increasingly sophisticated techniques to tackle doping in their sports.
▼ Results management/ Legal	Results management encompasses the process between notification of an athlete about an anti-doping violation, through the charge until the final resolution of the matter, including the end of the hearing process at first instance or on appeal. Furthermore, all IF legal costs related to these processes are included in this programme area.
▼ Education	IFs' education programmes focus on doping prevention by educating athletes and their entourages (parents, coaches, other support personnel). They incorporate values-based education, awareness-raising, information-provision and rules education. The topics vary depending on each IF, but typically aim to inform people about the risks of doping to athletes' health and careers, explain the WADA code and how to follow the rules with regards to testing, use of substances and TUEs, violations and other requirements.
▼ Therapeutic Use Exemptions	IFs are responsible for administering TUEs for athletes of their sport. A TUE allows an athlete to apply for use of a medication that contains a substance or requires an administration method that is on the List of Prohibited Substances and Methods of WADA. IFs' TUE Committees (TUEC) evaluate these TUE applications and may authorise athletes to use specific substances or methods.
▼ Overhead/ Administrative costs	Overhead/Administrative support refers to the general management areas of anti-doping that go beyond the previous six core programme areas. Usually these would include planning, communications, finance, human resources, technology and other administrative activities to support anti-doping operations.



### Online survey

The survey questionnaire was developed in collaboration with the AMSCG. The survey was conducted by independent external advisors Altman Solon in May-June 2023 through an online questionnaire distributed to all ASOIF members.

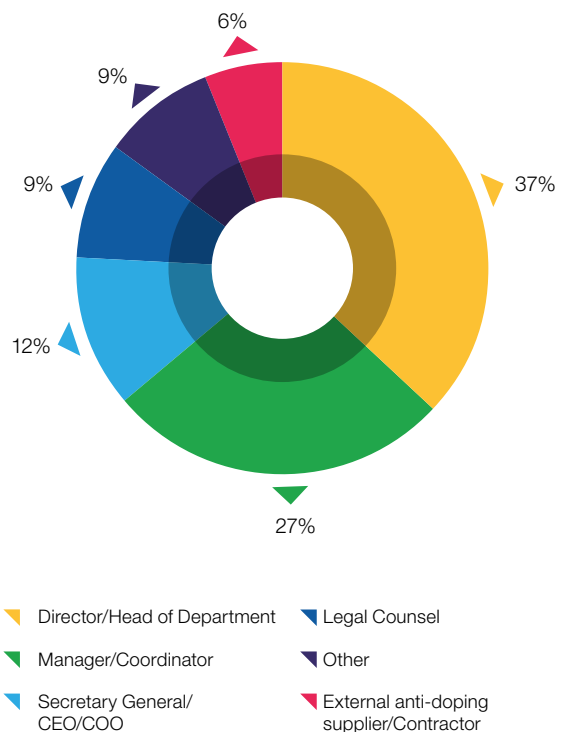
ASOIF received 33<sup>3</sup> complete responses to our questionnaire, a 100 per cent response rate. At the time of their responses, the majority of respondents held a director or manager position within their IF. The analysis of the data in the report reflects the collective views of the 33 respondents (no single IF can be identified).

The results of the financial analysis and the survey are presented in a series of charts and insights assembled by the AMSCG and our external advisors. Additionally, an “executive point of view” section included contributions by:

- ▼ WADA, the global anti-doping authority that defines the international standards and framework.
- ▼ The ITA, the leading independent service provider that runs anti-doping operations for a large number of IFs.
- ▼ The ITIA, an independent body established by the international governing bodies of tennis to promote, encourage and safeguard the integrity of professional tennis worldwide.

**Figure 18: Respondent profile by position**

Percentage of respondents, one position selected per IF



Source: ASOIF 2023 Anti-doping Survey, n=33

<sup>3</sup> The IOC withdrew recognition of the International Boxing Association (IBA) in June 2023. However, IBA has been included for the purposes of this report.



▼ **Badminton World Federation (BWF)**



▼ **International Canoe Federation (ICF)**



▼ **Fédération Equestre Internationale (FEI)**



▼ **International Federation of Sport Climbing (IFSC)**



▼ **Fédération Internationale d'Esgrime (FIE)**



▼ **International Golf Federation (IGF)**



▼ **Fédération Internationale de Basketball (FIBA)**



▼ **International Handball Federation (IHF)**



▼ **Fédération Internationale de Football Association (FIFA)**



▼ **International Judo Federation (IJF)**



▼ **Fédération Internationale de Gymnastique (FIG)**



▼ **International Shooting Sport Federation (ISSF)**



▼ **Fédération Internationale de Hockey (FIH)**



▼ **International Surfing Association (ISA)**



▼ **Fédération Internationale de Volleyball (FIVB)**



▼ **International Table Tennis Federation (ITTF)**



▼ **International Boxing Association (IBA)**



▼ **International Tennis Federation (ITF)**





▼ **International Weightlifting Federation (IWF)**



▼ **World Rowing**



▼ **Union Cycliste Internationale (UCI)**



▼ **World Rugby**



▼ **Union Internationale de Pentathlon Moderne (UIPM)**



▼ **World Sailing**



▼ **United World Wrestling (UWW)**



▼ **World Skate**



▼ **World Aquatics**



▼ **World Taekwondo**



▼ **World Archery**



▼ **World Triathlon**



▼ **World Athletics**



▼ **World Baseball Softball Confederation (WBSC)**



▼ **World DanceSport Federation (WDSF)**

# 9

## Acknowledgements



We are most grateful to all IFs that completed the Anti-doping Survey. We also extend our gratitude to WADA and the ITA for their assistance and insights. Without their co-operation and full support, this publication would not have been possible.

This publication was produced by ASOIF in co-operation with the AMSCG, Altman Solon and Touchline.

Thanks are due to Ioannis Meletiadis (Altman Solon) and Jeremy Foster (ASOIF) for their work throughout the course of this project.

### **Copyright**

No part of this publication may be copied, republished, stored in a retrieval system or otherwise reproduced or transmitted, in any form or by any means whatsoever, without the prior consent of ASOIF.

This publication and its contents are the property of ASOIF.

© ASOIF, Lausanne, November 2023

Design by Touchline

ASOIF – Association of Summer Olympic  
International Federations

Maison du Sport International, Avenue de  
Rhodanie 54, 1007 Lausanne, Switzerland

Tel : +41 21 601 48 88

Email : [info@asoif.com](mailto:info@asoif.com)

[www.asoif.com](http://www.asoif.com)

---

▼ **ASOIF**

**Association of Summer Olympic International Federations**

Maison du Sport International

Av. de Rhodanie 54, 1007 Lausanne - Switzerland

▼ **Tel.:** +41 21 601 48 88    ▼ **Fax:** +41 21 601 48 89

▼ **Email:** [info@asoif.com](mailto:info@asoif.com)    ▼ **www.asoif.com**