



ISTI

Guidelines for Implementing an Effective *Testing* Program

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1.0 Introduction and Scope

1.1 Introduction

Code Article 5.4 requires that each *Anti-Doping Organization (ADO)* with Testing Authority plan and implement intelligent *Testing* that is proportionate to the risk of doping among *Athletes* under its jurisdiction, and that is effective in detecting and deterring doping practices.

The objective of International Standard for Testing and Investigations (ISTI) Section 4.0 is to set out the steps necessary to produce a Test Distribution Plan (TDP) that satisfies this criteria. This includes:

- a. establishing the overall pool of Athletes within the *ADO's* anti-doping program;
- b. assessment of which *Prohibited Substances* and *Prohibited Methods* are most likely to be abused in a particular sport /sport discipline;
- c. appropriate prioritization between
 - sport(s)/sport discipline(s)
 - categories of *Athletes*
 - types of *Testing*
 - types of *Samples* collected
 - types of *Sample* analysis

These Guidelines for Implementing an Effective *Testing* Program will help *ADOs* understand how to apply the *Code* and ISTI requirements to their individual operating environments, enabling each *ADO* to implement and sustain effective, efficient anti-doping programs that are sensible, proportionate, and optimize available resources.

As with all Guidelines under the *Code*, this document is subject to ongoing review and assessment to ensure it continues to reflect best practice moving forward. *WADA* encourages feedback on this document and recommends stakeholders consult *WADA's* Web site, <http://www.wada-ama.org> for the latest version.

1.2 Scope

The primary objective of these Guidelines is to ensure that each *ADO* has an anti-doping program in place that is as effective as resources permit, and that maximizes the probability of both detection and deterrence.

The Guidelines present 5 key components of effective *Testing* Program implementation: 1) Information and Intelligence Gathering, 2) Risk Assessment, 3) Test Distribution Planning, 4) Whereabouts Integration, and 5) *Doping Control* Operations and Reporting.

Each section details related steps prescribed by the ISTI and provides best practice recommendations to equip ADOs to implement a *Testing* program that tests the **right Athletes** for the **right substances** at the **right time**.

Although procedural aspects of *Doping Control* (e.g. *Sample* collection) are outside the scope of this document, references to complementary WADA Guidelines are provided throughout.

1.3 Definitions

This document includes defined terms from the *Code*, and these *International Standards (IS)*: ISTI, International Standard for Laboratories (ISL), and International Standard for the Protection of Privacy and Personal Information (ISPPPI). *Code* terms are written in italics. *IS* terms are underlined.

Definitions are provided in Guidelines Section 11.

1.4 Key Provisions

Users of these Guidelines are advised to familiarize themselves with key provisions of the *Code* and ISTI listed below.

1.4.1 Key *Code* Provisions

Article 2: Anti-Doping Rule Violations

Article 5: *Testing* and Investigations

Article 6: Analysis of *Samples*

1.4.2 Key ISTI Provisions

Article 4: Planning Effective *Testing*

Article 11: Gathering, assessment and use of intelligence

Annex I: *Code* Article 2.4 Whereabouts Requirements

2.0 About Risk Assessment

Before diving into process and methodology, it's important to understand the fundamentals of Risk Assessment.

2.1 The Objective

Risk assessment is intended to increase the effectiveness of a *Testing* program through better use of finite *Testing* resources.

A proper assessment of doping risks is essential to determine where resources should be targeted and what type of focus *Testing* is most required.

The objective of a risk assessment is to:

- Obtain accurate, objective information on the types of sports and disciplines (as applicable) with a higher potential for doping behaviour;
- Obtain accurate, credible information on the types of *Athletes* with a higher potential for adopting doping behaviour, and what type of doping they may be at risk for; and
- Identify optimal times to apply specific test types (including analyses) to particular *Athletes* populations.

When an *ADO* knows what risks exist where, it can focus available resources:

1. Increasing the probability of catching cheating *Athletes* and deterring risk *Athletes*; and
2. Protecting the rights of clean *Athletes* to a level playing field.

However, risk assessment informs only part of an *ADO's* *Testing* decisions.

While an assessment can provide guidance on high-risk *Athletes* and sports, it can't fully predict doping behaviour or activities.

An assessment forms part of the greater comprehensive Test Distribution Plan that is informed by other ongoing information sources and intelligence. This will be further explained in Guidelines Section 5.

2.2 Why Risk Assessment Is Necessary

Besides being an ISTI mandatory requirement, a *Doping Control* program based on a thorough risk assessment can increase the certainty of catching cheating *Athletes* and deterring those who may be considering engaging in doping behaviour.

While traditional *Doping Control* strategies like Random Selection *Testing* have a place in an overall deterrence strategy, there is a significant amount of uncertainty that the tests conducted will catch cheating *Athletes*.

Identifying the specific risk factors related to a specific sport, discipline or particular group of *Athletes*, better positions *ADOs* to build an effective, efficient Test Distribution Plan that targets the individuals or disciplines more likely to engage in high-risk behaviour.

2.3 Identifying Risks

What is “Risk”?

In general, risk is defined as the uncertainty in outcomes against a planned outcome. In the anti-doping context, risk can be viewed as the uncertainty of outcomes in *Testing* results. Several factors can drive the uncertainty of *Testing* outcomes. Key factors to consider will be covered in Guidelines Section 3.

Conducting a thorough risk assessment that follows ISTI criteria and these guidelines, will position *ADOs* to identify what risks need to be addressed, and how to use this information to ensure sufficient resources are applied to *Testing* programs, as required by *Code* Article 23.3.

2.4 Collection and Assessment of Available Information

The primary source of data upon which to establish a risk assessment should be data that is publicly available (“open source” information) and data that has been collected in a consistent, standardized format over time.

Standardization of data collection (i.e. program testing statistics, *Athlete* performance history) strengthens the value and reliability of such information.

ADOs and *IFs*, in particular, should establish internal Processes that maximize the sharing of information between functional areas (e.g. sport performance monitoring, *Athlete* profiles, *Competition* statistics, and marketing), to benefit anti-doping initiatives.

2.4.1 Data Collection

The extent to which data may be available to support risk assessments will vary. The weight that certain information is afforded in a broad assessment should take into consideration the volume and reliability of this data.

2.4.2 Sources of data

Information on physical determinants (e.g. strength, power, aerobic aspects of sport training and performance) may be found via journal articles, *IF*-driven research or through other academic sources. *ADOs* without such readily accessible resources are encouraged to develop relationships with those sports (*ADOs*) with

similar physical attributes (e.g. Korfball-Netball) to share knowledge and exchange data.

In addition to acquiring information on the physical attributes of a sport or discipline, data should be gathered on what performance-enhancing substances or methods may be most beneficial to enhance these attributes.

Understanding which *Prohibited Substances* and *Methods* have been shown to enhance performance (or are perceived to be beneficial) can also be found in academic research papers, *WADA Doping Control* statistics, and by interviewing *Athletes* and monitoring relevant online *Athlete* discussion forums.

In accordance with *Code* Article 5.4.2, WADA developed — in collaboration with all ADOs — the Technical Document TDSSA2014, which assessed the sports and disciplines most at risk for abuse of certain “non-routine” analyses (i.e. Erythropoiesis Stimulating Agents, Growth Hormone and Growth Hormone Releasing Factors).

TDSSA2014 provides a useful starting point for a broader examination of all *Prohibited Substances* and *Methods* relative to the sport attributes at hand. More information on how this data may benefit *ADO Testing* strategies is provided in Guidelines Section 6.3.1).

2.5 Resource Allocation: Evaluating and Prioritizing

ADOs understand the need to prioritize their efforts and resources to implement *Testing* programs that are effective, while acknowledging the limitations of available financial and human resources.

ADOs are required to plan and implement an effective, intelligent and proportionate TDP that prioritizes appropriately (*Code* Article 5.4.2).

The ADO’s TDP must allocate resources available for *Testing* efficiently and effectively across the different sports (*NADOs*), different countries (*IFs*) and different disciplines, *Competitions*, leagues, age groups, and *Athletes*, etc. under the ADO’s jurisdiction.

The basis of the TDP is considered evaluation of the risks of doping for the sport(s)/country(ies)/discipline(s) in question. This must include an allocation of *Testing* resources between *In-Competition* periods and *Out-of-Competition* periods, depending on an assessment of the relative risks of doping in each such period.

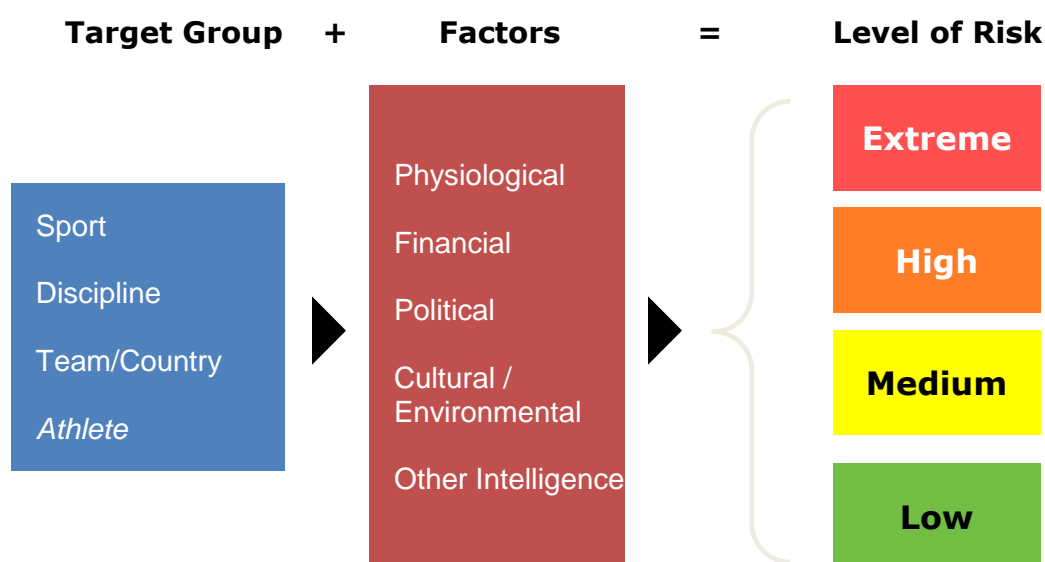
2.6 Target Groups

Collectively, the elements introduced above will help the ADO identify and prioritize the specific sport(s) and group(s) of *Athletes* targeted in the ADO’s TDP, and within that plan, the composition/profile of its *Registered Testing Pool* (*RTP*).

3.0 Identifying Predictive Factors / Gathering Intelligence

Predictive factors and intelligence gathering combine to provide *ADOs* a full, informed picture of the issues and opportunities in their individual environments – and influence the composition of the *ADO's RTP* and resulting *TDP*.

In reading this section, keep in mind the graphic below, which represents the central role predictive factors and intelligence gathering have in helping *ADOs* assess the level of risk associated with their target group(s).



3.1 Predictive Factors

Predictive factors are typically broad and population-based, and indicative of the different factors that can influence societal and individual attitudes and behaviors.

In this context, they are indicative of factors that can influence the attitude and behaviour of *Athletes* and *Athlete Support Personnel* toward doping.

3.1.1 Physiological Factors

Physiological demands of individual sports and disciplines can predict the types of sports that are more prone to doping and what types of doping might be most prevalent in each sport and discipline.

Physiological performance factors must be considered both *In-Competition* and *Out-of-Competition*, relative to the substances and methods prohibited *In-* and/or *Out-*

of-competition. *Out-of-Competition* assessments, in particular, should consider the training and recovery aspects of potential doping behavior.

ADOs should thoroughly evaluate the physiological attributes of sports and disciplines within their jurisdiction to understand the likelihood that particular *Prohibited Substances* and *Methods* may be of benefit to doping *Athletes*.

WADA's Technical Document on Sport Specific Analysis (TDSSA2014) can act as a starting point for such evaluations. Direction on how this information can benefit *Testing* strategies is provided in Guidelines Section 6.3.1.

3.1.2 Financial Factors

Financial incentives available to an *Athlete* can be a significant motivator for doping behaviour.

When considering financial factors, ADOs should identify possible incentives such as:

- a. Sports or disciplines with professional streams where *Athletes* on the cusp of elite status may take risks to obtain a contract and the possible financial rewards it affords, or when a contract is nearing completion and an *Athlete* seeks to maintain the financial security it affords;
- b. Any sport that offers exceptional payment for performance, especially at particular *Events* (prize money);
- c. Maintaining high levels of performance during injury, or with age, to maintain possible sponsorship.

Systems should be in place to capture significant and exceptional financial opportunities that may increase the likelihood of an *Athlete* adopting doping practices. Examples include *Athletes* who may suddenly become eligible for performance bonuses; those who suddenly move between professional and "amateur" jurisdictions; and those close to securing contracts at an elite level.

3.1.3 Political Factors

Several political and/or cultural incentives can be correlated to doping behaviour that are particularly relevant to International Federations (IFs). These may involve explicit policies and behaviours from sport administration or governance, or general attitudes towards doping and drug use in a particular country.

Factors to consider include:

- a. State sponsorship of teams that seek financial benefit from the profile (and success) of that team.
- b. Known political and economic corruption in a particular country.

- c. The drug laws and drug enforcement capacity of particular countries.
- d. History of doping in a particular country.
- e. Paid transfer of citizenship for *Athletes*.

[Comment: Athletes who accept to be paid to transfer nationality may, whether directly or indirectly, become susceptible to pressures to perform that could lead to doping behaviour.]

- f. Country hosting upcoming (or recently held) Major Events;

Although independent indices of corruption cannot definitively indicate that doping practices may be widespread, they do provide useful guidance on where corrupt practices may be more prevalent.

When reviewing such independent assessments of corruption, it may also be useful to examine doping statistics in these countries to assess the possible correlation. Readily available indices include unodc.org, worldbank.org, transparency.org, and maplecroft.com.

3.1.4 Cultural and Environmental Factors

The culture surrounding a sport or particular *Athlete*, or the environment in which they train and live in, can strongly influence attitudes toward doping and the level of doping behaviour in which the *Athlete* may engage.

Factors to consider include:

- a. Doping history or perceived culture in a particular sport, discipline or region.
- b. Training and *Competition* calendars (i.e. sports with significant periods between *Competitions* increases the risk of out of *Competition* doping, and location of training relative to local risk factors).
- c. Association with entourage members (i.e. working with coaches, physicians, etc. that have been previously linked to doping).
- d. Stage of career relative to retirement.
- e. Education level (with particular reference to anti-doping knowledge).
- f. Motivational climate (i.e. how much the *Athlete* is influenced by a “win at all costs” mentality within their team or training environment).

At the individual *Athlete* level, certain characteristics may also increase the predisposition toward doping behaviour, including:

- a. Concern about weight maintenance.
- b. Unruliness, disrespect for authority.
- c. Admiration for achievements of known doped *Athletes*.

- d. History of substance abuse in family.
- e. Belief that “everyone else is doping.”
- f. Propensity for bending the rules/impatience.
- g. Non-discretionary use of dietary supplements.

3.2 Collection of Additional Information and Intelligence

Beyond the predictive factors of doping to be considered in the risk assessment required by ISTI Article 4.2, ADOs should establish mechanisms to capture information and intelligence that can act as alerts to potential doping at a more discrete level.

Such information includes, but is not limited to, factors and behaviours identified in ISTI Article 4.5.3:

- a. Prior ADRVs/test history, including any abnormal biological parameters (blood parameters, steroid profiles, etc.);

[Comment: WADA’s Athlete Biological Passport (ABP) Operating Guidelines promote a comprehensive infrastructure to integrate longitudinal study of at-risk Athlete’s biological parameters to effectively and intelligently identify and Target Test those Athletes most likely to be engaged in doping.]

- b. Sport performance history, including in particular sudden major improvements in performance, and/or sustained high performance without a commensurate *Testing* record;

[Comment: Athletes whose performance improves dramatically in a short period of time should not be considered an indictment of an Athlete; however these improvements may be reflective of the effects of doping.]

- c. Repeated Failure to Comply with whereabouts requirements;
- d. Suspicious Whereabouts Filing patterns (e.g. last-minute updates of Whereabouts Filings);
- e. Moving to or training in a remote location or a location deemed to be high risk, due to political or cultural factors;

[Comment: While Athletes must be afforded every opportunity to update their whereabouts information at the last minute to account for unforeseen circumstances, ADOs should be diligent in monitoring possible abuse. Athletes who regularly update their submissions at the last minute without good cause, regularly train in remote locations difficult for Sample Collection Personnel to access, or Failure to Comply with all aspects of their whereabouts responsibilities should be monitored closely.]

- f. Withdrawal or absence from expected *Competition*;

[Comment: Athletes who suddenly withdraw from a competition (e.g. 24-48 hours prior) may represent a higher risk for doping where they have potentially been alerted to the presence of (increased) Doping Control or they may have concerns that Prohibited Substances or Methods have not yet cleared their system.]

- g. Association with a third party (i.e. teammate, coach, doctor or other *Athlete Personnel*) with a history of involvement in doping;

- h. Injury;

[Comment: Since frequent Testing isn't conducted on injured Athletes, this period may be abused for doping, especially given any further incentives to the Athlete (financial or otherwise) to expedite their recovery.]

- i. Age/stage of career (e.g. move from junior to senior level, nearing end of contract, approaching retirement);
- j. Financial incentives for improved performance (e.g. prize money or sponsorship opportunities); and/or
- k. Reliable information from a Third Party, or intelligence developed by or shared with the ADO.

Additional "red flags" which may be identifiable and traceable include:

- a. Overtraining or insufficient recovery time from injury;
- b. Previous or current absence or weakness of deterrant *Doping Controls*;
- c. Lack of resources such as professional training equipment, information, nutrition and technology; and/or
- d. Performance setback or plateau.

Many of the aforementioned factors are likely not the sole indicators of doping behaviour. Any combination of multiple factors should be considered as establishing higher risk for an *Athlete* or particular group of *Athletes*.

3.3 Data Prioritization and Assessment

3.3.1 Prioritization of Predictive Factors

Regardless of how an *ADO* chooses to “score” and categorize the risk inputs, an absence of data doesn’t equate to the absence of risk for that particular factor.

Weighting should acknowledge the reliability of certain well-informed data (i.e. Laboratory data, doping statistics), but models should also recognize other less quantifiable factors to a degree. Additionally, where possible, efforts should be made to establish data collection Processes to fill these knowledge gaps and help validate some risk factors.

3.3.2 Assessment of Available Information

Assessment of all data, information and intelligence collated by *ADOs* should be systematically categorized to assign a factor or category of risk to sports, disciplines, nations, teams, and/or individual *Athletes*, as is appropriate.

NADOs, for example, that will be responsible for *Testing* in many sports and disciplines should adopt a classification scheme to support an appropriate allocation of tests relative to each sport and discipline (also to be discussed in Guidelines Section 4.2.2).

Similarly, *IFs* should adopt a scheme that accounts for the disciplines under their jurisdiction, and the variations in risk across nations, regions and *Athlete* level(s).

Weighting of the various factors should reflect the extent to which these factors can be quantified and validated. For example, one rudimentary scheme would assign a category based on the predictive factor inputs collected, and then consider the availability of such information.

To further clarify the role of predictive factors/prioritization and intelligence gathering/assessment in Test Distribution Planning, refer back to the graphic at the beginning of this Section.

4.0 Prioritizing and Planning Effective *Testing*

4.1 Objective

Where it is perceived that the risk of doping is higher during *In-Competition* periods vs. *Out-of-Competition* periods, *In-Competition Testing* must be made a priority, and a substantial amount of *In-Competition Testing* conducted.

Conversely, if it appears the risk of doping is higher during *Out-of-Competition* periods, then *Out-of-Competition Testing* becomes the priority, and a substantial amount of *Out-of-Competition Testing* conducted.

Once an ADO determines how much *Out-of-Competition Testing* is to be done in the relevant period, it must decide how much of that *Testing* will be devoted to *Athletes*:

- a. In its *RTP*, i.e. those *Athletes* for whom it will have extensive whereabouts information); and
- b. Not in its *RTP*, i.e. *Athletes* for whom it will not have the full whereabouts information required under ISTI I.3, including *Athletes* designated in other “tiers” of the pyramid *Testing* model presented in Guidelines Section 7.2. One key consideration in determining this ratio is the expectation that *RTP Athletes* be tested no less than 3 times a year.

For sports where it can be clearly shown that *Out-of-Competition* doping is unlikely to enhance performance or provide other illicit advantages, little or no *Out-of-Competition Testing* is acceptable.

Such sports are very much the exception rather than the norm, and WADA requires the ADO to demonstrate it conducted a thorough, good faith assessment to reach its conclusion, and that the ADO continues re-evaluate the assessment on a regular basis.

4.2 Setting Priorities and Optimizing Available Resources

Given IFs and NADOs will not necessarily share exactly the same focus, neither is bound by the other’s risk assessment of doping in a particular sport.

IFs are primarily focused on protecting the integrity of the sport in general, particularly *International Events*, and are entitled to take into account the strength of the national anti-doping program within each country under their jurisdiction.

This may lead an IF to concentrate its anti-doping resources in those countries without a NADO, or where the NADO has insufficient resources to allocate to *Athletes* competing at an elite level in the IF’s sport.

NADOs are primarily focused on protecting the integrity of sport in their respective countries, which may include focusing not only on elite-level *Athletes*, but also developing *Athletes*.

Additionally, NADOs may have national imperatives to consider that give particular sports or disciplines greater importance. A disproportionate rate of participation in a sport, or the popularity of a sport may accentuate the risks/importance of the sport or discipline, and influence resource allocation.

Furthermore, a *NADO* with sufficient *Testing* resources to cover every single sport played in its country is entitled to prioritize certain sports, in accordance with its national anti-doping policy imperatives. This may mean the *NADO* doesn't include *Athletes* from other sports in its *RTP*, even if they are in an IF's *RTP*.

4.2.1 Establishing the Overall *Athlete* Pool

The *Code* definition of "*Athlete*" allows *NADOs* to limit the number of sportsmen and women who would be subject to their full national *Testing* programs. It also allows IFs to focus their anti-doping programs (including *Testing*) on those who compete regularly at the international level (i.e. *International-Level Athletes*, as defined by the IF).

Conversely, a *NADO* may decide to extend its anti-doping program (including *Testing*) to sportsmen and women who compete below the national level.

The *Code* requires each IF to publish, in clear and concise form, the criteria it uses to classify *Athletes* as *International-Level Athletes*, so that it is clear to all where the line is drawn, and how particular *Athletes* are to be classified. For example, if the criteria include competing in certain *International Events*, then the IF must publish a list of those *Events*.

Regardless of the definition used, the main focus of an IF's TDP should be *International-Level Athletes*, and the main focus of a *NADO's* TDP should be *National-Level Athletes* and above. Consequently, when establishing an overall pool of *Athletes* to be subject to an anti-doping program, ADOs must ensure that the pool is not so large that it detracts from the greater focus of ensuring sufficient resources are available for *Testing Athletes* at the highest level.

4.2.2 Prioritizing Between Sports and/or Disciplines

ADOs are to consider if any factors warrant prioritizing allocation of *Testing* resources to one sport or discipline or nation (as applicable) under its jurisdiction over others (ISTI Article 4.4.1). ADOs are required to review and assess the risk of all sports or disciplines under its jurisdiction, relative to the population of *Athletes* available for *Testing*.

For IFs, assessing the relative risks of doping between different disciplines and nations within its sport should be a part of the risk assessment reflected in its TDP. Tests are to be allocated according to greatest risk.

NADOs are to assess the relative risks of doping between different sports and disciplines under its jurisdiction — and any national anti-doping policy imperatives that may lead it to prioritize certain sports over others.

Where the risk of doping is assessed as equal between two different sports, disciplines or nations, more resources should be devoted to the sport, discipline or

nation involving the larger number of *Athletes* who compete at a high level or possess high-risk characteristics, as set out in the next section.

4.2.3 Prioritizing Between Different *Athletes*

Once the overall pool of *Athletes* has been determined, and priority sports and disciplines allocated, groups and individual *Athletes* subject to *Target Testing* need to be identified. This assignment takes precedence over random *Testing*. Give these *Athletes* have been identified to be of the highest risk for doping, they should represent a significant proportion of the overall TDP.

These *Athletes* warrant carefully planned tests that consider the timing of the test relative to *Competition*, "at risk" periods, and the *Sample* types to be collected and analyzed, relative to physiological doping risks and likely/perceived *Administration* regimes.

Criteria to identify these *Athletes* are detailed in Guidelines Section 4.2.3.

In addition to identifying individual *Athletes* who meet "red flag" characteristics, other factors need to be considered to ensure the *Athlete* pool is of a manageable and appropriate size. At a minimum, the following types of *Athletes* should be considered:

- For IFs: *Athletes* or Teams (especially from priority disciplines or nations) competing regularly at the highest level of international *Competition* (e.g. candidates for Olympic, Paralympic or World Championship medals), as determined by rankings or other suitable criteria;
- For NADOs: *Athletes* who are on/might be selected for national teams in Olympic, Paralympic or other sports of high national priority;
- *Athletes* who train independently, but perform at the Olympic, Paralympic or World Championship level and who may be selected for such *Events*;
- *Athletes* in receipt of public funding;
- High-level *Athletes* who are nationals of other countries, but who are present (whether residing, training, competing or otherwise) within the NADO's country;
- Elite junior-level *Athletes* on the cusp of senior competition.

[Comment: NADO TDPs are strongly encouraged to include Athletes from other countries in their respective Testing plans. In many instances, Athletes may be training abroad during high-risk periods and may feel they are beyond the reach of their NADO. Testing of "foreign" Athletes also provides domestic Athletes with some assurance that their competitors are being held to the same standard. The strength of the Athlete's own NADO program should also be considered in evaluating the need for such tests.]

- *Athletes* serving a period of *Ineligibility* or a *Provisional Suspension*; and
- *Athletes* who were high priority for *Testing* before they retired from the sport, and who now wish to return from retirement to active participation in the sport.

4.2.4 Prioritizing *Testing* Types

ISTI Articles 4.2 to 4.5 should dictate the type of risk assessment *Testing* to be conducted. Quite simply, the type of test to be applied and included in the TDP is that which most effectively addresses the risks at hand.

The following “types” of tests include elements that are uniquely capable of addressing specific risks:

- ***In-Competition:*** Where risks are present for substances that are only prohibited *In-Competition*; namely, Stimulants, Narcotics, Cannabinoids and Glucocorticoids.
- ***Out-of-Competition:*** Where risks are associated with doping that may include intermittent use, micro-doping or other doping behaviour where detection windows are limited.
- ***Urine:*** Urine *Samples* are capable of providing a matrix for analysis that includes the vast majority of *Prohibited Substances* and *Methods*, and is the basis of the Steroidal Module of the *ABP*. Unless good reason suggests otherwise, all *Doping Controls* must include a urine *Sample* and a routine urine analysis.
- ***Blood:*** Certain substances and methods are only detectable via blood. *ADOs* should always consult the relevant WADA-accredited Laboratory on available methods and preferred matrices. In general, blood is the sole matrix capable of addressing the risks of Homologous and Autologous Blood Transfusions, certain Continuous Erythropoiesis Receptor Activators (CERA), Growth Hormone (GH), Growth Hormone Releasing Factors (GHRFs), and Haemoglobin Based Oxygen Carriers (HBOCs).
- ***Athlete Biological Passport (ABP):*** The *ABP* Haematological Module requires a specific type of blood *Sample* that must meet specific requirements, as set out in WADA’s *ABP* Operating Guidelines. These requirements relate to pre-analytical considerations, and stringent transport and analysis requirements. *ABP Testing* (Haematological Module) is an advanced method of establishing an *Athlete’s Use of Prohibited Substances or Methods* related to blood doping (i.e. red blood cell enhancement and artificial improvement of oxygen transfer).

[Comment: The 2015 Code requires that all WADA-accredited Laboratories make available to ADOs their available methods and costs for these services. ADOs may securely access this information in ADAMS.]

Considering the aforementioned test types is essential if an ADO is to implement an effective *Testing* program. Not all tests achieve the same objective. The “right” test needs to be selected and implemented at the “right” time to maximize the probability of detection and address relevant risks effectively. ADOs should contact WADA and the relevant *Laboratory* for more specific advice on the types of *Tests* that may be available and how best to optimize analysis following the collection of particular *Sample Types*.

5.0 Developing a Test Distribution Plan

5.1 Key Considerations

Just as the prioritization exercises help the ADO determine the relevant population its TDP needs to address, allocation of actual tests must also support a strategy for addressing risk. *Testing* numbers alone mean very little without a well thought-out plan to back up those figures.

As described Guidelines Section 2.0, the process of developing a TDP requires a combined approach of identifying risks, then sourcing the best tools to address those risks.

Once those questions have been answered, there are additional elements to include in a TDP.

ISTI Article 4.1.3 requires ADOs to document their TDP. This is particularly important for monitoring during implementation phase and evaluation upon plan completion.

Should an ADO seek WADA’s approval (pursuant to *Code* Article 6.4.2) to analyze *Samples* using a less extensive menu than that set out in the Technical Document referenced in *Code* Article 5.4.1, it must provide evidence that the request has basis. Such basis will also be required for any possible reduction in *Out-of-Competition Testing*, and for compliance evaluation in general (or in exceptional circumstances an overall “exemption”).

At a minimum, a documented TDP should include the number of tests, type of tests and analyses that will be conducted across the sports, disciplines, nations and/or *Athletes*, as appropriate.

Additionally, the following information should be included:

Guidelines for Implementing an Effective *Testing* Program

- General language on the process used to evaluate the relevant risks, and the outcomes of these assessments (e.g. Extreme, High, Medium, Low);
- How these risk factors are converted to a number of tests relative to the total TDP;
- General information on the timing of these tests either by week, month or quarter to ensure they are implemented at the appropriate time, and over the course of the year;
- The selection policy for *Out-of-Competition Testing*, which should include *Athlete-specific Testing* strategies (“micro” TDP for the very highest risk *Athletes*); and
- For *In-Competition Testing*, names of relevant *Events* to be tested, including dates, selection policies and other relevant details.

ADAMS supports TDP implementation through real-tracking of the test status (planned/not planned) and *Sample* status (collected/not collected, analyzed/not analyzed, and successfully completed/not completed, e.g. unable to locate the *Athlete*).

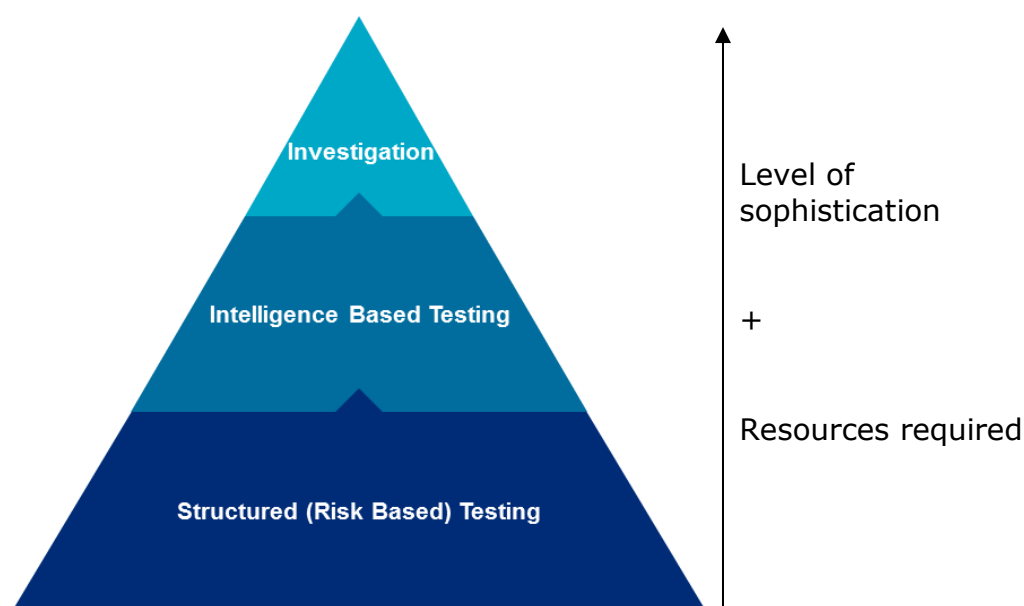
5.2 Pyramid *Testing* Model of Deterrence and Detection

Unpredictability is the cornerstone of an effective *Testing* strategy, working against the cheating *Athlete* (unable to modify his/her schedule) and working for the clean *Athlete*, who views variability as protecting clean sport.

Beyond the principle of unpredictability, these Guidelines recommend a “pyramid” *Testing* model. This model addresses the highest risks (predictive factors, *Athletes*), implements an intelligent detection strategy, and also serves to deter an even broader population of *Athletes* from doping by ensuring that “baseline” *Testing* occurs across the board on all *Athletes* at all times.

The pyramid *Testing* model also recognizes the availability of certain data upon which to predicate strategic *Testing*, while laying a foundation for more general *Testing* to collect additional data to use for annual TDP evaluation.

Figure 1. Pyramid *Testing* Model - Intelligence-Based *Testing* and Risk-Based *Testing*



5.3 Overview - Deterrence/Structured *Testing*

For sports, disciplines and *Athletes* deemed to be lower on the spectrum of risk, a deterrence model of *Testing* should be implemented that covers a broad range of *Athletes*, and demonstrates that any *Athlete* can be tested at any time or place.

Such *Testing* should be led by the risk factors that are relatively quantifiable (e.g. physiological attributes, doping statistics). Such *Testing* is relatively random at the individual level, but recognizes the priorities of the TDP and can serve to conduct basic testing (and collect *ABP* data) on *Athletes* who have yet to compete at an “elite” level.

Broad “risk-based” *Testing* can act as a foundation to validate assumed risk factors, and is an especially useful guide for what *In-Competition Testing* may be necessary. For example, more (unpredictable) *Testing* at *Events* in a high-risk sport will be more useful than less *Testing* across many sports.

In this respect, optimization of resources means using the right tool for the job. *Testing* across many sports (*In-Competition*) may have the appearance of equitability when, in fact, it may be doing a disservice to clean *Athletes* in high-risk *Events* that go untested.

5.4 Overview – Intelligence-Based Testing

Structured Random Selection Testing founded on basic risk factors isn't sufficient to operate an effective *Testing* program. However, this approach is a useful starting point that can serve to develop a more enhanced approach over time.

As more *Testing* is conducted based on general risk factors, more data is collected, and a smarter *Testing* framework that relies predominantly on facts vs. perceptions can be implemented. This approach requires usable data collected over time (i.e. the *ABP*) to inform *Doping Controls* that predict **who** to test, for **what**, and **when**.

Intelligence-based *Testing* (*Target Testing*) is testing driven by risk, but also by specific data and intelligence. The *Code* and ISTI require that most *Testing* be targeted. Therefore, a substantial amount of the "pyramid" (and resources allocated to it) should contain such *Testing*.

Collection of data and systems to "raise red flags" is required, e.g. monitoring return from injury, changes in performance and abnormal biological profiles.

Given this type of information exists in various forms, but isn't consistently or centrally tracked, *ADOs* should begin to devise systems for standardized collection and monitoring procedures to improve the ability to implement intelligence-based *Testing*.

[Comment: ADAMS 2016 will be developed with these requirements in mind. To the extent possible, ADAMS will be enhanced to automate irregular patterns or associations that may be indicative of doping behaviour that warrants Targeted Testing or further investigation.]

6.0 Information and Intelligence Gathering

6.1 Investigations

Code Article 5.8 requires ADOs to obtain, assess and Process anti-doping intelligence from all available sources. The need to develop complex systems to meet this requirement must be interpreted in the context of the risk that is present, and the resources and expertise available. Regardless of the risk and resources available, the *Code* and ISTI require all ADOs to establish mechanisms for the most basic collection and scrutiny of information and intelligence, even though it is recognized that not all ADOs are equipped to conduct proactive investigations.

For those ADOs facing doping risks that require or are best identified by non-analytical means, establishing a robust approach will require more sophisticated methods. Cooperation between ADOs and law enforcement may be required to target *Athletes* or groups of *Athletes* involved in doping.

[Comment: WADA's Guidelines for Coordinating Investigations and Sharing Anti-Doping Information and Evidence provides more details on appropriate, effective conduct in this area.]

Investigative approaches that combine *Testing* with other intelligence-gathering strategies should be seen as the optimum approach in the pyramid model. *Testing* has limitations, and many ADRVs can't be established through *Testing* alone.

As the ISTI (Article 11.1.1) states:

"While Testing will always remain an integral part of the anti-doping effort, Testing alone is not always sufficient to detect and establish to the requisite standard all of the anti-doping rule violations identified in the Code. In particular, while Use of Prohibited Substances and Prohibited Methods may often be uncovered by analysis of Samples, the other Code anti-doping rule violations (and, often, Use) can usually only be effectively identified and pursued through the gathering and investigation of 'non-analytical' anti-doping intelligence and information. This means that Anti-Doping Organizations need to develop efficient and effective intelligence-gathering and investigation functions."

All ADOs must reflect on what ways and means related to ISTI Articles 11 and 12 can be adopted and implemented. Modest, achievable initiatives include:

- "Tip" lines and their promotion to *Athletes* and *Athlete Support Personnel* to solicit information and to foster an environment amongst *Athletes* of accountability.

- *Athlete* interviews following adverse findings to collect additional information on the nature of their doping, such as the timing and *Administration of Prohibited Substances and Methods*, and those involved.
- Thorough review of DCO reports, to be aware of suspicious trends or useful information.
- Training of field staff, to be aware of types of information that may assist the *ADO* in how it collects and records such information.
- Liaising with scientific and WADA-accredited Laboratory Experts to determine appropriate detection windows (biological half-lives), potential emerging doping substances and methods, and possible strategies to optimally plan future *Sample* collections.

[Comment: Regular dialogue with Expert Laboratory staff will also alert ADOs to ongoing intelligence which may inform additional Target Testing. For example, Samples with microbial degradation (affecting steroidal variables), the absence of proteins (potentially indicative of the use of protease or intentional dilution, or even substituted urine), should be discussed to determine possible Testing strategies going forward.]

Enhanced database systems can assist in meeting these requirements. WADA will continue to provide support, training and advice in this area as global practice becomes increasingly standardized.

6.2 Establishing Analytical Strategies

Athletes remain subject to the full *List of Prohibited Substances and Methods* at all times. However, the *Code* and *Standards* recognize that, in the interest of resource efficiency and pragmatism, *Samples* don't need to be analyzed for all *Prohibited Substances and Methods*. Laboratories conduct a standard "routine" analysis on all urine *Samples* received, with ADOs having the discretion to request additional "specialized" analyses.

[Comment: This discretion should be based predominantly upon TDSSA2014 and Testing, above and beyond the minimum requirements and informed by the thorough risk assessment that the ADO has conducted regarding the physiological benefits of particular substances relative to the performance characteristics of the sport(s) or disciplines at hand.]

ADOs are encouraged to 1) refer to *ADAMS* for details on costs and methods at all Laboratories, to make informed decisions on which "additional" analyses may be available, and 2) communicate with the Laboratory regarding the applicability of these tests, should there be any uncertainty.

6.3 Appropriate and Effective Analysis of *Samples*

6.3.1 Role of the Technical Document (TDSSA2014)

In determining which additional analyses to perform, *ADOs* must, at a minimum, follow the prescribed levels of analysis set out in the Technical Document for Sport Specific Analysis (TDSSA2014). This mandatory document is intended to ensure that the *Prohibited Substances* within the scope of TDSSA2014 deemed to be at risk of abuse in certain sports/disciplines, but not currently sufficiently tested for, are subject to an appropriate, consistent level of analysis by all *ADOs* that conduct *Testing* in those sports/disciplines.

While an important aspect to implementing an effective *Testing* program, compliance with TDSSA2014 alone provides no guarantee of effectiveness. TDSSA2014 must be implemented as a part of a larger, information-driven program. For example, ensuring that the prescribed percentages of TDSSA2014 are applied to the “right” *Athlete(s)* at the “right” time(s) is of paramount importance.

The development of the TDSSA2014 has been based on an objective, scientific approach that links physiological and non-physiological demands of *Athlete* performance with the potential ergogenic benefit of applicable *Prohibited Substances*.

While the TDSSA2014 is a core element of ensuring minimum levels of “smart” analysis, by no means does adherence to it result in a fully effective analytical strategy. The prescribed percentages are minimum values and *ADOs* are encouraged to take advantage of *Code Article 6.4.1*, which provides for *ADOs* to request that Laboratories analyze their *Samples* using more extensive menus than those prescribed in this Technical Document.

Additionally, the TDSSA2014 is intended to be complementary to other anti-doping strategies such as the *ABP*, intelligence gathering and investigations, and *Targeted Testing*. Substances within the scope of TDSSA2014 include:

Erythropoiesis Stimulating Agents (ESAs)

ESAs include recombinant erythropoietins and their analogues and mimetics that stimulate erythropoiesis (red blood cell production). ESAs increase net oxygen delivery to muscles by increasing red cell mass and $VO_{2\max}$ thereby improving endurance. ESAs are also known to allow *Athletes* to undertake intensive training sessions and be used to support a faster recovery during heavy training phases.

[Comment: Testing for ESAs should predominantly focus on Out-of-Competition periods when Athletes feel they are less likely to be tested, and as they prepare for Events when they expect to be tested and are less likely therefore to have ESAs in their system. In-Competition Testing may be appropriate at multiple-day Events]

where micro-dosing may occur, and variability in the time of Testing should be considered, especially early in the morning.]

Growth Hormone (GH) and Growth Hormone Releasing Factors (GHRFs)

The majority of the minimum levels of analysis for GH/GHRFs should be conducted for GH, as all WADA-accredited Laboratories can analyze for GH, but not all currently have the methods to analyze GHRFs.

GH is a hormone normally produced by the pituitary gland of the brain. The metabolic actions of GH also interact with those of Insulin and anabolic steroids, promoting enhanced anabolic effects and increased lean muscle mass. Growth hormone also has a strong lipolytic effect (loss of fat) and may improve soft tissue healing and recovery.

GHRFs are synthetic substances that may have performance enhancing effects by stimulating the endogenous production of GH. GHRFs can be analyzed in urine or blood serum. ADOs should confirm with the applicable Laboratories (those with the capacity for this test) which matrix and methods are validated in the Laboratory. When a blood *Sample* is collected for GH analysis, GHRFs should also be analyzed in any urine *Sample* collected during the same Sample Collection Session.

Currently, GH can only be detected in blood serum.

There are two types of detection methods for GH:

1. GH isoforms (direct detection method)
2. GH biomarkers (indirect detection method).

ADOs should request both types of GH detection methods when analyzing a *Sample* for GH. These two tests are complementary in nature and in the time window of hGH detection. The hGH Isoforms Test detects the alteration of proportions (ratios) between hGH isoforms up to 24-48 hours after recGH administration.

The Biomarkers Test is based on measuring the increased synthesis of two biological *Markers* of hGH bioactivity, namely IGF-I and P-III-NP, and it may not detect the initial phase of recGH use, but does so at later times and for a longer period than the Isoforms Test.

ADOs using TDSSA2014 as a starting point for their own risk assessment, as required by ISTI Article 4.7, may wish to consider this objective evaluation in their own deliberations on other applicable risks and substances.

For example, those sports with higher requirements for GHRFs and GH should consider that risks will also be high for other substances with similar properties; namely, anabolic steroids and Insulins. Additionally, increased TDSSA2014 percentages for anabolic agents, and high risks for ESAs also warrant special

attention and resources for the respective *ABP* Steroidal and Haematological Modules.

TDSSA2014 doesn't prescribe minimum levels of analysis for Haemoglobin Based Oxygen Carriers (HBOCs), Homologous Blood Transfusion (HBT), or Insulins. Analysis for HBOCs, HBT and Insulins therefore should be part of a *Target Testing* strategy based on intelligence (e.g. as provided by the *ABP* Haematological Module or other sources of intelligence).

6.3.2 Role of the *Athlete Biological Passport*

The *ABP* is an invaluable, efficient means of directing a targeted analysis strategy. It enables the identification of *Athletes* for specific analytical *Target Testing* through intelligent, timely interpretation of *Passport* data, and is also a viable means of establishing a *Use*-related ADRV (*Code* Article 2.2).

The *ABP* is also an excellent tool to determine which *Athletes* (and *Support Personnel*) may warrant increased non-analytical attention, based on identified patterns or trends amongst groups of *Athletes* who may be living, training or otherwise have a common relationship with particular coaches, physicians or other *Athlete Support Personnel*.

Haematological Module

Targeted Testing could be for Erythropoiesis- Stimulating Agents (ESAs) or Homologous Blood Transfusion (HBT).

[Comment: The Haematological Module collects information on Markers of blood doping. The Module aims to identify the Use of Prohibited Substances and/or Prohibited Methods for the enhancement of oxygen transport or delivery, including the Use of ESAs and any form of blood transfusion or manipulation. In addition to identifying the use of ESAs included under Section 2 of the Prohibited List (Peptide Hormones, Growth Factors and Related Substances), the Haematological Module also seeks to identify the Use of Prohibited Methods categorized under Section M1 of the Prohibited List (Manipulation of Blood and Blood Components).]

Steroidal Module

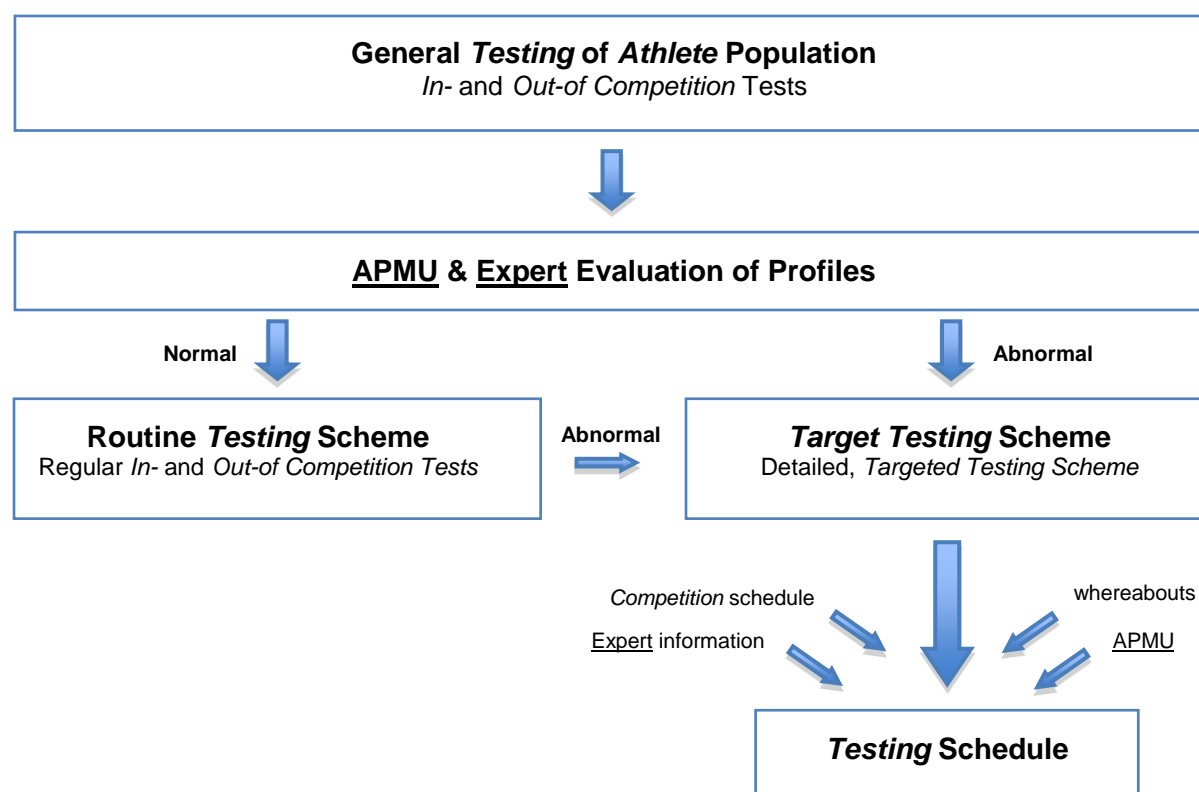
Targeted Testing could be done to detect the Use of Gas Chromatography-Combustion-Isotope Ratio Mass Spectrometry (GC-C-IRMS) to detect exogenous steroids.

[Comment: The Steroidal Module collects information on Markers of steroid doping. The Module aims to identify endogenous anabolic androgenic steroids (EAAS) when Administered exogenously and other anabolic agents, such as selective androgen receptor modulators (SARMS) categorized under Section S1.2 of the Prohibited List.]

All ADOs operating an ABP Program should liaise closely with their *Athlete Passport Management Unit (APMU)* to inform *Targeted Tests* that follow their ongoing review of *Athlete* profiles. These intelligence-led tests should always be prioritized over *Random Selection* (structured) *Testing* to maximize the chances of detection.

Comments from *APMUs* and *Experts* on *Athlete* profiles should be closely monitored, and the timing and frequency of *Testing* should follow their specific advice.

Figure 2. ABP Testing Flowchart



6.4 Retention of Samples and Further Analysis

Code Article 6.5 makes clear that any *Sample* may be subject to further (additional) analysis by an ADO. This ability means that an ADO should maintain records of what analysis has occurred on all *Samples* to be able to identify opportunities, (through new intelligence or available analytical methods) to analyze *Samples* for substances or methods not previously analyzed for.

To support this possibility, the ADO must incorporate into its *TDP* a strategy for retention of *Samples* to enable further analysis of such *Samples* at a later date, as per Code Article 6.5.

A retention policy should consider the following factors:

- Laboratory recommendations on further analysis and storage;

[Comment: Samples may be deemed suspicious by the Laboratory while not having met adverse or atypical criteria. The Laboratory may recommend retaining the Sample for further analysis, based on a new test or pending method that may be applicable.]

- The possible need for retroactive analysis in connection with the ABP Program;

[Comment: In some instances, an ABP Sample will present parameters indicative of the abuse of a particular method or substance. The Laboratory, APMU, or Expert Panel may recommend a particular analysis that has not already been conducted or suggest analyzing stored samples previously collected from the Athlete that remain in storage and were not analyzed for specific substances (i.e. ESAs).]

- New detection methods to be introduced in the near future relevant to the Athlete, sport and/or discipline; and/or
- Samples collected from Athletes meeting some or all of the "high risk" criteria set out at ISTI Article 4.5.
- New intelligence regarding doping strategies that may have been carried out by applicable Athletes.

[Comment: The ISL requires Laboratories retain Samples for no less than three months following analysis. The opportunity to "go back" and conduct further analysis is limited by this provision. ADOs must consider what new methods may be applicable to risk Athletes under their jurisdiction (in conjunction with the Laboratory or APMU), and accordingly devise a retention policy beyond three months to facilitate further analysis. At a minimum, ADOs should identify potential "at risk" Athletes whose Samples would be usefully stored no more than 10 years in accordance with Code Article 17 and no less than three months.]

Establishing the scope of an ADO's retention policy must also consider the cost of storing Samples and costs for potential further analysis, and weigh those against the relative benefits of collecting and analyzing more Samples in the present.

6.5 Review of Test Distribution Plan

Ongoing evaluation of the TDP as a whole, and on a per Athlete basis, is strongly encouraged. While the TDP begins as a static document based on the risks assessed, once initiated, it needs to become dynamic, reacting to new information (e.g. *Athletes* performing beyond expectation); intelligence (e.g. *ABP* parameters); successfully completed tests; and *Testing* that has been unsuccessful, either because of an *Athlete* not being located, or because planned resources (Sample Collection Personnel) couldn't be secured.

A TDP review should also include an assessment of additional factors and metrics that gauge the plan's efficacy by evaluating how predictable it was/wasn't.

Such metrics could include:

- DCO performance where an *Athlete* was tested on multiple occasions, particularly with regards to how unpredictable the tests were in timing and location (especially where a DCO has been afforded discretion in this regard).
- History of *Sample* collection times and locations on individual *Athletes*.
- Number of times a specific *Athlete* was tested by the same DCO.
- Any history of dilute *Samples* or repeated minimum volume provided by a given *Athlete*.
- Number of times an *Athlete* hasn't been located outside of their designated 60-minute period (for *RTP Athletes*), or at other designated locations for *Athletes* in other whereabouts pools.
- A pattern of Laboratory comments on the *Samples* of a particular *Athlete* (e.g. degradation, dilution, absence of proteins).

Reflection on how *Testing* has been conducted, and how it could be improved upon, is key to ensuring that annual Test Distribution Planning is part of a cycle of continuous improvement.

6.5.1 **Identifying and Analyzing Outcomes: Review of Available Data**

In addition to the aforementioned metrics, two databases available to *WADA Signatories* (Testing Authorities) can assist in collating data for the identification of trends and risks that may prompt changes to Test Distribution Planning.

- i. The Anti-Doping Administration and Management System

The reporting functions of *ADAMS* provide a wealth of data on an *ADO's* testing program as well as on *testing* conducted by other *ADOs* on *athletes* who may be a part of multiple *TDPs*. In addition to capturing the 'real time' status of all *testing* in terms of whether a particular *test* is 'planned,' 'issued,' 'collected' or complete, *ADAMS* can facilitate customized reports that will sort and filter testing by dozens of variables such as Sport/discipline, Nationality/Sport Nationality, Country/Region, *Test Type/Analysis*, *Laboratory(ies)*, Specific Dates (ranges), and *ABP* results (including *ATPFs*).

By generating reports on such data, *ADOs* may identify information that can assist in determining whether or not the original *TDP* was adhered to, and what elements may require improvement in the next planning cycle with regards to improving unpredictability and ensuring the 'right' athletes are being tested at the 'right' time. *ADAMS* reporting also permits an *ADO* to monitor its ongoing TDSSA compliance in order to make necessary adjustments over time.

ii. The Anti-Doping Results Questionnaire (ADRQ)

The ADRQ is a secure online system launched by *WADA* in January 2013 to collect supplementary information on all doping controls that result in an *Adverse Analytical Finding (AAF)*. This platform aims to build a rich set of data to analyze for trends and information that can be utilized by *ADOs* to inform testing strategies. Such information includes, for example, whether or not adverse findings were based on a targeted *test* (information or intelligence), whether or not whereabouts information was used, and the location and timing of the test.

The ADRQ is pre-populated with information from *ADAMS* including the laboratory result and data from matched doping control forms and *Athlete* profiles. The more information that has already been included in *ADAMS* by an *ADO*, the less data that will be required by the ADRQ.

A report function on the main page allows users to extract submitted AAFQs and save the data in an excel document in order to identify trends and results within their own program. This provides the *ADO* (and *WADA*) a database that, over time, will assist in identifying tendencies related to certain AAFs. The ages, genders, nationalities etc. of Athletes whose sample(s) have returned an *AAF* can be examined within a larger context to see if certain doping behaviour (such as the use of specific substances) can be attributed to certain populations.

Trends may also be identifiable regarding the optimal timing of testing for certain substances relative to specific training and competition schedules. *WADA* will continue to examine such data as it becomes available. All *ADOs* are encouraged to identify ways of using this free tool for their own purposes and to complete all

ADRQs (in accordance with *ISTI* Article 12.2.2) to ensure that comprehensive data is available for global review.

7.0 Whereabouts Program Integration

7.1 Objective

Whereabouts is intended to support *Out-of Competition No Advance Notice Testing* needs, not as a primary means of achieving deterrence.

However, whereabouts information collected by an *ADO* may also be used to provide information relevant to the *ABP* or other analytical results; to support an investigation into a potential *ADRV*; and/or to support proceedings alleging an *ADRV* (*Code* Article 5.6).

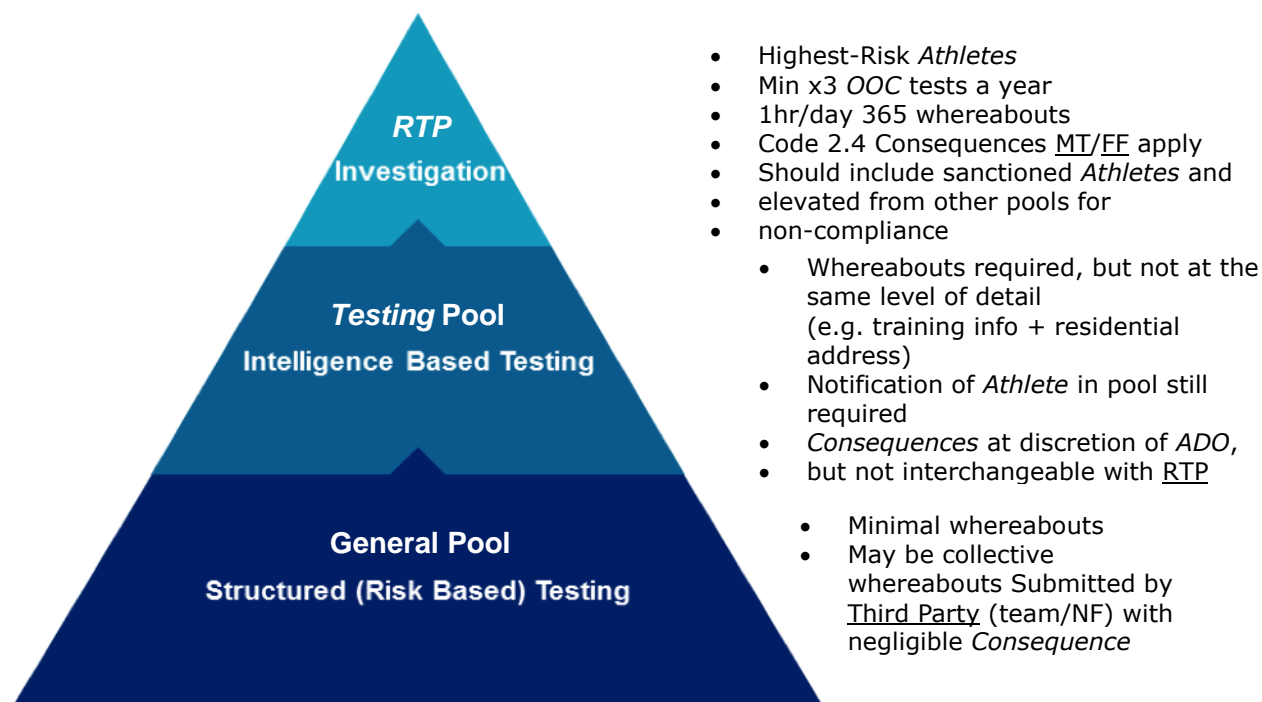
When deciding which *Athletes* must provide whereabouts information, and at what level of detail, *ADOs* should consider those additional elements.

ADOs may determine that they need more whereabouts information for certain categories of *Athletes* (*ISTI* Article 4.8.3). Here is where *ADOs* can again apply the “pyramid approach” used in risk assessment and prioritization (introduced in *Guidelines* Section 7.2).

7.2 Pyramid Testing Model and RTP

Athletes are put into different tiers, based on *Testing* priority, with the *ADO* determining for each tier, how much whereabouts information it needs to conduct the amount of *Testing* allocated to those *Athletes* in the *TDP* effectively and efficiently.

Such an approach would require that the whereabouts requirements reflect the probability of *Out-of-Competition Testing* on these *Athletes* both in terms of the details required, and the number of tests to be allocated on these “tiers.”

Figure 3. Pyramid Whereabouts Model

7.2.1 Highest-Risk *Athletes* at the top of the Pyramid

At the top of the pyramid are the highest risk *Athletes* with the highest probability of being tested *Out-of-Competition*.

The *Code* requires these *Athletes* (in RTPs):

- Provide detailed information, on a quarterly basis, about their whereabouts in the following quarter; and
 - Be available at those whereabouts for *Out-of-Competition Testing*.
- If an *Athlete* in a RTP fails to meet those requirements 3 or more times in any 12-month period, he/she commits an ADRV under *Code* Article 2.4, and is liable to be *Disqualified* from sport for a period of between 12 and 24 months (or more , if a repeat offence).

7.2.2 Tiers Correlate *Athlete* Risk to *Testing* Type

ISTI Article 4.8.3 suggests ADOs identify a pyramid with different tiers of *Athletes*, in its TDP:

Bottom Tier: Represents those *Athletes* from whom little or no whereabouts information is required (General Pool) to find them for the *Testing* allocated to them in the TDP.

Above Tiers: Contain *Athletes* from whom more whereabouts information is required, because there is little information available from other sources to find them for *Testing*, including *Out-of-Competition Testing* (*Testing Pool*).

Top Tier: *Athletes* from whom the greatest amount of whereabouts information is required, because they are likely to be selected for the greatest amount of *Testing* (including *Out-of-Competition Testing*), and there is insufficient whereabouts information available for them from other sources to locate them for that *Testing* (*RTP*).

The top tier of *Athletes* should contain high-profile *Athletes* (e.g. contenders for national and/or international honours), *Athletes* in an *ABP* Program, and *Athletes* at the highest risk of doping (ISTI Article 4.5).

In accordance with Article 4.8.4, this top tier of *Athletes* must be put into a *RTP* (so as to trigger the Code Article 2.4 Whereabouts Requirements) unless the *ADO* is clearly able to obtain sufficient whereabouts information about such *Athletes* by other means.

IFs and *NADOs* bear primary responsibility for administering these whereabouts requirements, first by designating *Athletes* under their jurisdiction for inclusion in (respectively) international and national *RTPs*, and then by collecting whereabouts information from those *Athletes*, using that information to test those *Athletes Out-of-Competition*, and also making that information available to other *ADOs* with *Testing* jurisdiction over those *Athletes*, so that they can test them *Out-of-Competition* as well.

IF or *NADOs* (dependent upon which *ADO* the *Athlete* files whereabouts with) then also have primary results management responsibility when *Athletes* in their respective *RTPs* fail to file proper whereabouts information (Filing Failures) or are not present where they said they would be for *Testing* purposes. See ISTI Article I.5.

Any *ADO* that seeks to collect a *Sample* from an *Athlete* using his/her whereabouts information may only declare a Missed Test on that *Athlete* if it has met the requirements of ISTI Article I.4.3, including making a reasonable attempt to find the *Athlete* at his declared whereabouts.

The relevant principles are set out in *Code* Articles 2.4, 5.6, 10.3.2 and 14.5, and the specific whereabouts requirements are detailed in ISTI Annex I. There is also significant guidance as to the implementation of these requirements set out in *WADA's Results Management, Hearings and Decisions Guidelines*.

8.0 RTP Requirements

8.1 Which *Athletes* should be in the *RTP*?

ISTI Article 4.8 makes clear that each *ADO* has discretion to determine the size and make-up of its *RTP* that best meets the needs of the sport/country over which it has anti-doping jurisdiction.

However, the ISTI also requires that where an IF or a *NADO* plans to collect 3 or more *Samples* per year *Out-of-Competition* from particular *Athletes*, it shall put them into a *RTP* (so that they are required to comply with the Code Article 2.4 Whereabouts Requirements) unless the *ADO* is clearly able to obtain sufficient whereabouts information to conduct No Advance Notice Testing efficiently and effectively by some other means.

Each IF and each *NADO* has discretion to determine, independently of the other:

- a. how much *Out-of-Competition Testing* it needs to conduct in respect of the sport(s) under its jurisdiction;
- b. whether the *Athletes* on whom it decides to conduct that *Testing* need to comply with the Code Article 2.4 Whereabouts Requirements to conduct the planned *Testing* on them effectively and efficiently and on a No Advance Notice Testing basis.

Alternatively an assessment needs to be made about whether sufficient whereabouts information is available by other means to conduct such *Testing*, so that subjecting the *Athletes* in question to the Code Article 2.4 Whereabouts Requirements is unnecessary. This means that the number of *Athletes* in an international *RTP* may vary from sport to sport; and the number of *Athletes* in a national *RTP* may vary from country to country.

The *ADO* must also be able to demonstrate it has made a proper assessment of the relevant risks and of the necessary prioritization in accordance with ISTI Articles 4.2 to 4.5, and that it has adopted appropriate criteria based on the results of that assessment. In particular, an *ADO* whose TDP includes *Testing* during *Out-of-Competition* periods must have a RTP of *Athletes* who are required to comply with the Code Article 2.4 Whereabouts Requirements, unless it can demonstrate that it is able to find those *Athletes* for No Advance Notice Testing during all *Out-of-Competition* periods without requiring compliance with the Code Article 2.4 Whereabouts Requirements. However, there should not be more *Athletes* in a *RTP* than the IF or *NADO* in question plans (on its own or in agreed coordination with other *ADOs* with Testing Authority over those *Athletes*) to test *Out-of-Competition* at least 3 times a year.

In particular, an IF/*NADO* **can't say** that a history of few, if any, *AAFs* demonstrates there is no risk of *Out-of-Competition* doping in a particular sport — unless there has been a full and effective *Out-of-Competition Testing* program in that sport, based on the use of comprehensive *Athlete* whereabouts information and other anti-doping intelligence. An absence of *AAF* says little, if anything, about the risk of *Out-of-Competition* doping in the sport in question.

8.1.1 The Relationship Between the *RTP* and the TDP

The IF/*NADO* should not require *Athletes* to provide the daily whereabouts information required under ISTI Annex I unless that information is going to be used by the IF/*NADO* and/or other *ADOs* to locate the *Athletes* for purposes of *Out-of-Competition Testing*, and that they cannot be located on a no-notice basis *Out-of-Competition* by alternative means.

It follows that the IF/*NADO* cannot begin to consider the size and make up of its *RTP* until it has drawn up the TDP for its sport/country for the relevant period. That is because it is only in drawing up the TDP that the IF/*NADO* will identify how much *In-Competition Testing* it is going to conduct, and how much *Out-of-Competition Testing* it is going to conduct in the relevant period (and how much of that *Out-of-Competition Testing* it is going to conduct on *Athletes* in its *RTP* vs. other potential pools). The process of drawing up a TDP is set out in further detail in ISTI Section 4 and is addressed herein in more detail under Guidelines Section 5.

Once the IF/*NADO* has finalized its TDP, and so knows how much *Testing* is allocated to the *Athletes* in its *RTP* for the relevant period, that number should operate as a key parameter in determining the size and make up of its *RTP*. This is because it would be inappropriate to require *Athletes* to provide whereabouts information, and to make sure they are where they have said they will be, if that information is not going to be used to find them for *Testing* purposes.

For example, if an IF/*NADO* draws up a TDP that provides for 200 tests to be conducted *Out-of-Competition* on *Athletes* in the *RTP* in the following 12 months, it would be inappropriate to put 500 *Athletes* in the *RTP* for that period.

In exceptional cases, it may be appropriate for an IF to have no *Athletes* in its *RTP*. Where the risk of *Out-of-Competition* doping is assessed to be low or negligible, there may be little need for *Out-of-Competition Testing*, and therefore a *RTP* may not be necessary.

These are exceptional cases, i.e. in the small number of sports and/or disciplines where it is determined in good faith that there is no material risk of doping during *Out-of-Competition* periods, where it may be permissible to conduct no *Out-of-Competition Testing* and therefore whereabouts information is redundant.

Comment: ISTI Article 4.6a) ii affords ADOs the opportunity to exceptionally conduct no Out-of-Competition Testing, however this determination is subject to the ADO demonstrating to WADA that its risk assessment was conducted in accordance with Article 4.2.

8.1.2 Criteria for *RTP* Inclusion

Having determined approximately how many *Athletes* should be in its *RTP*, the IF/*NADO* has to identify and document the criteria for *Athletes* to be included in that pool. Code Article 5.6 requires that each IF and *NADO* shall make available through *ADAMS*, or another system approved by *WADA*, a list which identifies those *Athletes* included in its *RTP* either by name or by clearly defined, specific criteria.

The expectation is that, unless good reason exists otherwise (e.g. if such inclusion is inconsistent with the *NADO's* national anti-doping policy imperatives or the *Athlete* can be located for *Out-of-Competition Testing* by alternative and demonstrable means), a national *RTP* may include:

- a. *Athletes* over which a *NADO* has jurisdiction that have been included in an international *RTP*;
- b. *Athletes* who are part of national teams in Olympic or Paralympic or other sports of high national priority (or who might be selected for such teams); and
- c. *Athletes* who train independently but perform at Olympic/Paralympic or World Championship level and may be selected for such events.

These expectations also assume the aforementioned level of athlete is included in the *ADO's TDP* to the extent they may be tested three or more times annually and that the *RTP* is not so large that it exceeds the administrative capacity of the *ADO* to ensure that *Athletes'* rights are protected in relation to their right to be adequately notified of their inclusion and informed regarding their responsibilities.

In each case, however, the responsible *ADO* should also include in its *RTP*:

- a. *Athletes* who are serving periods of *Ineligibility*;
- b. *Athletes* who retired while in the *RTP* and now want to return to *Competition*; and may also include
- c. Any *Athletes* under its jurisdiction that it wishes to target for *Testing*.
Examples of *Athletes* in the final category might include *Athletes* training with *Athlete Support Personnel* previously associated with doping practices; *Athletes* for whom reliable information from a *Third Party* has indicated possible doping practices; and similar; *Athletes* who have achieved a significant and unexpected improvement in performance; and similar).

Non-Team Sports

In non-Team Sports, examples of potentially relevant criteria for *RTP* might include:

- Medal-winners from the most recent Olympic/Paralympic Games or World Championships.
- The top ranked *Athletes* in each discipline and/or weight category.
- Additional *Athletes* from those disciplines and/or weight categories where doping may be of particular benefit.
- *Athletes* whose performances are in the top 5/10/20 for the previous/current year.

Team Sports

In Team Sports, *RTPs* may be defined by reference to teams, i.e. so that the *Athletes* in the *RTPs* are some or all of the *Athletes* who play for particular teams (identified by name, ranking or other suitable criteria) during the relevant period.

Examples of potentially relevant criteria for *RTPs* in *Team Sports* might include:

- Medal winners from the most recent Olympic/Paralympic Games and/or World Championships.
- Some or all members of the national representative teams that qualified for the most recent World Championships.
- Some or all members of the top-ranked teams according to the IF's official rankings or relevant league tables/standings.

Key Considerations

Special considerations for *NADOs* may include the national anti-doping imperatives referenced at ISTI Article 4.4.1.: Those *Athletes* under its jurisdiction who have been included in an IF's *RTP*; those *Athletes* in receipt of public funding; and any other *Athletes* competing (or with the potential to compete) at the highest levels of national *Competition*.

The responsible *ADO* should also take into account the *Competition* calendar for the relevant period. For example, it may be appropriate to change or increase the number of *Athletes* in the *RTP* in the lead up to an Olympic or Paralympic Games or a World Championships.

The responsible *ADO* should also consider at what point the criteria are to be applied. For example, if the criterion is (say) the top 100 ranked men and top 100 ranked women in a particular discipline, or top 10 teams from one or more age-groups, the responsible *ADO* will have to specify that it is the rankings as of a particular date that apply.

Regardless of the criteria that an *ADO* chooses to adopt, it should be mindful to establish a criteria that is clear and unambiguous to minimize unnecessary notifications to *Athletes* of their inclusion/departure to the *RTP*. It is recommended that once an *Athlete* is added to the *RTP*, he/she remains there for the remainder of the calendar year so that responsibilities are clear.

[Comment: This recommendation follows the need for Athletes to clearly understand how long they will need to provide whereabouts information, to simplify the RTP management in terms of adding/removing Athletes as they meet/no longer meet the inclusion criteria, and to see that they remain in the pool long enough to be tested sufficiently.]

8.1.3 Other Whereabouts Pools

In fixing its *RTP*, the IF/*NADO* is entitled to bear in mind the ability to create other pools of *Athletes* who are subject to different whereabouts requirements (i.e. *Testing* Pool or General Pool).

This discretion is designed in particular to give *ADOs* the flexibility to maintain larger pools of *Athletes* from whom some whereabouts information is obtained, which may not meet the requirements of the ISTI and become subject to *Code* Article 2.4, but which is nevertheless useful information that can be used to increase the effectiveness of the *ADO's Out-of-Competition Testing* program.

This discretion is designed in particular to give *ADOs* the flexibility to maintain pools of *Athletes* from whom some whereabouts information is obtained that may not meet the *Code* Article 2.4 Whereabouts Requirements but which nevertheless is useful and can be used to increase the effectiveness of the *ADO's Testing* program.

For example, an IF/*NADO* may decide it needs to conduct a certain amount of *Out-of-Competition Testing* on a particular category of *Athletes* in a sport where *Competition* and/or training is organized and carried out on a team basis rather than an individual basis, but that it can conduct that *Testing* effectively and on a No Advance Notice Testing basis by using information made available to it about the movements of the *Athletes* as part of their team, participating in Team Activities.

However, if that team information isn't sufficient to conduct the *Testing* required of such *Athletes* effectively and on a No Advance Notice Testing basis, and instead to conduct that *Testing* it is necessary to require the *Athletes* to comply with the *Code* Article 2.4 Whereabouts Requirements, then the IF/*NADO* must put the *Athletes* into its *RTP*.

A guiding principle in determining the level of detail required from *Athletes* in other pools should be proportionality. No more information should be collected than is necessary, and the burden on the *Athlete* should be commensurate with the probability that this athlete will be tested regularly.

The IF/*NADO* should notify each *Athlete* designated for inclusion in other whereabouts pools of the following:

- a. The fact that he/she has been included in the applicable pool;
- b. The whereabouts requirements with which he/she must therefore comply (including requirements for updating this information); and
- c. The *Consequences* if he/she fails to comply with those whereabouts requirements.

The notice should also explain what the *Athlete* needs to do in order to comply with those requirements (i.e. use of *ADAMS*).

If an *Athlete* in the tier below the *RTP* fails to comply with the whereabouts requirements applicable to his/her tier, the IF/*NADO* in question should consider moving the *Athlete* up to the *RTP* or apply other *Consequences*, provided they don't undermine those set out in ISTI Annex I.

By way of example, an *Athlete* may not be included in a *NADO's RTP* at the start of a particular year. Instead, the rules of his/her *NADO* or IF may require him/her to provide certain limited whereabouts information (e.g. declaring only when he/she will be with other *Athletes* on the same *Team*, participating in Team Activities).

In such circumstances:

If the *Athlete Fails to Comply* with those requirements, that will not be a Whereabouts Failure under *Code* Article 2.4, but instead it will be a breach of the *NADO's* or IF's rules for which the sanction(s) specified in those rules will apply.

A potential sanction may be:

- the *Athlete* is put forward for inclusion in the IF's and/or *NADO's RTP*;
- written reprimands/warnings; or
- financial sanctions.

Any Failure to Comply with the whereabouts requirements of these "lower" pools can't be mixed and matched for the purposes of *Code* Article 2.4

However, if during the year the *Athlete* is put into a *RTP* (and now theoretically in two different whereabouts pools), then he/she will no longer be subject to the whereabouts requirements set out in the previous rules, but instead will be subject to the more stringent whereabouts requirements of ISTI Annex I.

The *ADO* that placed the athlete in an *RTP* will in turn share this information with the other applicable *ADO(s)*. Any failure to meet those requirements will be a Whereabouts Failure that can be combined with other Whereabouts Failures for purposes of *Code* Article 2.4.

8.2 Recommended Administrative Processes

8.2.1 Publishing the *RTP* Criteria and *Athlete* names

Where *ADAMS* or another approved system is used to collect whereabouts information from *Athletes* in the *RTP*, then the names of those *Athletes* will automatically be available to *WADA* and other relevant *ADOs* as required under *Code* Article 5.6.

To comply with *Code* Article 5.6, each IF and *NADO* must make available to *WADA*, the applicable IF/*NADO* and all other *ADOs* with Testing Authority jurisdiction over those *Athletes*:

1. The criteria it uses to determine which *Athletes* should be in its *RTP*, and/or
2. A list of the *Athletes* meeting those criteria, and so included in its *RTP*.

This can also be done through Web site publication, inclusion in an *ADO's anti-doping* rules appendix, or in any other appropriate manner. The the criteria and list of names don't have to available to the public.

It is sufficient if the criteria and the list of names of *Athletes* who meet those criteria are made available in writing to *WADA*, the IF/*NADO* (as applicable), and all other *ADOs* who also have *Testing* jurisdiction over those *Athletes*. (See *Code* Article 14.5).

It is particularly important that an IF communicates promptly and clearly with *NADOs* whose *Athletes* might be in the IF's *RTP*, so that they can discuss and agree on which IF and *NADO* will collect whereabouts information from those *Athletes* who are also in the *NADO's RTP* to act as the Whereabouts Custodian, and consequently be responsible for all results management related to Missed Tests and Filing Failures in accordance with ISTI Annex I.

Comment: Further details on these results management responsibilities are set out in WADA's Results Management, Hearings and Decisions Guidelines.

8.2.2 Managing *Athletes* in both *NADO* and IF *RTPs*

An IF and a *NADO* will have concurrent jurisdiction over certain *Athletes*. An *Athlete* may simultaneously be in the *RTP* of both its IF and its *NADO* (but cannot be in two different pools with different sets of requirements).

However, an *Athlete* must not be asked to provide whereabouts information to more than one *ADO*.

Of primary importance is that an IF communicates promptly and clearly with *NADOs* whose *Athletes* might be in the its *RTP*. Discussion and agreement are required to determine which of IF/*NADO* will collect whereabouts information from those

Athletes and act as the Whereabouts Custodian, consequently becoming responsible for all results management related to Missed Tests and Filing Failures — and for making it available to the other and to other *ADOs* with *Testing* jurisdiction over the *Athlete* (ISTI Annex I).

[Comment: WADA's Results Management, Hearings and Decisions Guidelines provide further details on these results management responsibilities.]

Ordinarily, pre-existing agreement between an IF and *NADO* on the collection of whereabouts information from certain *Athletes*, should be continued. Otherwise, neither an IF nor *NADO* can insist that either takes responsibility for collecting whereabouts information from an *Athlete* in both pools.

In discussing which *ADO* will take responsibility for all aspects of an *Athlete's* whereabouts and its management, *ADOs* may wish to consider:

- A broader discussion on a joint *Testing* strategy;
- If the *Athlete* is a part of an *ABP*, how such information will be managed and shared; and
- How can any other relevant intelligence be communicated between the *ADOs* in the interest of coordinating the most effective program possible for the *Athlete(s)* of a joint interest.

If agreement can't be reached, then the IF and *NADO* each should explain in writing to *WADA* how they believe the matter should be resolved. *WADA* will decide based on the best interests of the *Athlete*, taking into account (without limitation) the following factors:

- a. If one of the *ADOs* uses *ADAMS* and the other doesn't, the *ADO* using *ADAMS* will be favoured; and
- b. If there is an established prior practice or agreement, that should continue to be followed/respected, absent good reason.

8.2.3 Notifying an *Athlete* of *RTP* Inclusion

The IF/*NADO* must notify each *Athlete* designated for inclusion in its *RTP* of the following:

- a. the fact that he/she has been included in its *RTP*;
- b. the whereabouts requirements with which he/she must therefore comply; and
- c. the *Consequences* if he/she fails to comply with those whereabouts requirements.

The notice should also explain what the *Athlete* needs to do to comply with those requirements.

If the *Athlete* is in the IF's and the NADO's RTPs, then each of them should notify the *Athlete* that he/she is in its pool.

Prior to doing so, however, they should resolve between them which should be the responsible ADO for purposes of collecting whereabouts information from the *Athlete*, and each notice sent to the *Athlete* should specify that he/she should provide his/her whereabouts information only to the Whereabouts Custodian.

In each case, the notification may be made through the National Federation or *National Olympic Committee* where the IF/NADO considers it appropriate or expedient to do so.

Without proof of such notification, an ADO cannot establish either a Filing Failure or a Missed Test on the part of the *Athlete*. (See ISTI clauses 11.3.5(a) and 11.4.3(a)).

See WADA's Results Management, Hearings and Decisions Guidelines for an *Athlete* notification letter template.

8.2.4 Periodic Review of RTP Composition

The IF/NADO is required to review its RTP criteria periodically to remain fit for purpose, i.e. the IF/NADO is capturing all/only appropriate *Athletes*. At the very least, this must be done when drawing up the next TDP.

The IF/NADO must also periodically review its RTP *Athletes* list to ensure that each *Athlete* continues to meet the necessary criteria. There are no uniform requirements for when this should be done.

If rankings are the primary criteria in the particular sport/discipline and remain relatively static throughout the year, it may only be necessary to "refresh" the RTP once a year.

If the rankings change materially during the year, it may be appropriate to re-apply the rankings criterion every six months, or even every quarter.

As a general principle, avoid changing the composition of the RTP too frequently, given the administrative burden of notifying and training new entrants in the whereabouts requirements and applicable responsibilities.

IFs/NADOs should therefore consider whether it is really necessary to re-apply the basic criteria during the year, or alternatively whether they can address any particular developments during the year by using the residual discretion they always have to add an *Athlete* to the pool at any time.

8.3 Whereabouts Filing Requirements

8.3.1 What information must the *Athlete* provide?

ISTI Article I.3 details what whereabouts information must be provided by an *Athlete* in a *RTP* and when. Where daily information is required, it must be provided for each day of the following quarter, even if the *Athlete* is travelling, or competing, or on holiday, on any such day.

For basic guidance on what information won't be sufficient, and therefore amount to a Filing Failure, see ISTI Articles I.3.1, 11.3.2, and, in particular, Articles I.3.3 to I.3.5.

The overriding principle is that the *Athlete's* responsible for making him/herself available for *Testing*. In particular, if the *Athlete* specifies a location for the 60-minute timeslot where he/she isn't easy to find and/or doesn't remain at that location for the full 60-minute timeslot, then he/she risks a Missed Test.

Additional information required of *RTP Athletes* includes:

Residence: The *Athlete* must provide, for each day in the following quarter, the full address of the place where he/she will be residing (i.e. sleeping overnight). Usually, that address would be expected to be in the same vicinity as the location specified for the 60-minute timeslot for that day, unless the *Athlete* will be travelling to another city or town during the day and wishes to specify a location at his/her destination for the 60-minute timeslot. If circumstances change so that the *Athlete* will be residing at a different place one or more nights, he/she should update his/her Whereabouts Filing to identify where he/she will now be residing as soon as that information becomes known.

[Comment: The residence that an Athlete indicates on any given day should be presumed to be the location where they will be going to sleep on that night. It is assumed therefore that the following morning the Athlete will be in the same location.]

Regular Activities: The *Athlete* must provide the name and address of each location where he/she will train, work or conduct any other regular activity during the following quarter, and the usual timeframes for such regular activities.

[Comment: It is expected that RTP Athletes are elite-level Athletes and will have such an activity (regular training), which must be included in the Whereabouts Filing. This particular requirement should be emphasized in any education or induction for new RTP Athletes.]

For these purposes, an activity is only "regular" if it is done as part of a standard schedule/in accordance with a routine pattern or practice.

For example, if an *Athlete* goes for a run every Friday, it qualifies as a regular activity for these purposes, and should be disclosed on his/her Whereabouts Filing.

But if he/she runs once a week, but the day on which he/she runs varies from week to week, depending on the weather or other variables, that does not qualify as, and so does not have to be disclosed as, a “regular activity” on his/her Whereabouts Filing.

If the *Athlete’s* regular schedule changes during the quarter, he/she should update his/her Whereabouts Filing to reflect the change. For example, if he/she changes schedule so that instead of going to the gym every morning from 10 am to noon, he/she goes every afternoon from 2 p.m. to 4 p.m., then he/she should update his/her Whereabouts Filing to reflect that change.

Conversely, if the *Athlete* simply departs from his/her regular schedule on a one-off basis, he/she does not need to update his/her Whereabouts Filing to reflect that. For example, if he/she usually goes to the gym every morning from 10 a.m. to noon, but on one particular day in the quarter, he/she goes to the gym between 3 p.m. and 4 p.m. instead, no update is necessary to reflect that.

60-minute timeslot: The *Athlete* must provide, for each day during the following quarter, one specific 60-minute timeslot between 5 a.m. and 11 p.m. each day, where the *Athlete* will be available and accessible for *Testing* at a specific location. (ISTI Article I.3.2). If circumstances change, and the *Athlete* will no longer be at that location at that time, he/she should update his/her Whereabouts Filing to identify a new timeslot and/or new location for the original timeslot.

[Comment: Text messaging, Short Message Service (SMS) or updates via a mobile app should be limited to situations where the Athlete couldn’t make a full update by computer prior to the new location taking effect, and updates should only be for short durations, not applicable to significant periods in the future.]

If an *Athlete* doesn’t know, at the beginning of the quarter, precisely what his/her whereabouts will be for each day in the quarter, he/she must provide his/her best information, based on where he/she expects to be at the relevant time(s), and then update that information as necessary.

For example, if an *Athlete* knows that during the second week of the first month of the following quarter, he/she will be in New York, staying at the players’ official hotel while preparing for, and then competing in, a US Open *Event*, but doesn’t yet know which hotel is the official hotel, he/she should put, “US Open players’ official hotel, New York, NY, further details to be advised” as the place where he/she will be residing that week, and designate that same location and an hour when he/she will be in the hotel room (e.g. 6 a.m. to 7a.m.) for the 60-minute timeslot for that day.

Thereafter, once the *Athlete* is advised of the name and address of the official hotel, he/she should update his/her Whereabouts Filing with those details. Once he/she has further details of his/her schedule while in New York, he/she should consider whether he/she wants to designate a new time and/or location for the 60-minute timeslot or leave the original Filing as is.

If an *Athlete* will generally be at home during the next quarter, will be away at some point during the quarter, but is not sure when, where or for how long, then for the whole of the relevant period he/she should put down as the residence address (and, at his/her election, as the location for the 60-minute timeslot) the place where he/she will be staying if he/she does not go away. Once the *Athlete* receives the details of the trip, he/she must update his/her Whereabouts Filing to reflect those details.

The responsible *ADO* should monitor Whereabouts Filings for patterns of behaviour that may indicate an *Attempt* to evade *Sample* collection, or otherwise undermine or hinder the *Doping Control Process*. For example, if an *Athlete* is constantly updating his/her Whereabouts Filings to change the time and/or location for his/her 60-minute timeslot at the last minute, the responsible *ADO* should consider whether this may reflect a concerted effort to undermine attempts to locate him/her for *Testing*.

Such a pattern of last-minute updates should be investigated as a possible ADRV under Code Article 2.5 (*Tampering or Attempted Tampering with any Part of Doping Control*) or 2.3 (*Evading, Refusing or Failing to Submit to Sample collection*).

[Comment: WADA has developed both an iPhone and Android whereabouts app for the purposes of updating ADAMS-based whereabouts. ADOs are encouraged to promote its use amongst RTP Athletes to maintain accurate whereabouts information and to simplify the process for Athletes. This app is available via WADA's Web site.]

8.3.2 Sharing an *Athlete's* Whereabouts Filing

The responsible *ADO* is required to establish a system that ensures that (i) whereabouts information provided by an *Athlete* in its *RTP* is stored safely and securely; and (ii) the information can be accessed by a) authorized individuals acting on behalf of the responsible *ADO* on a need-to-know basis only; b) *WADA*; and c) other *ADOs* with *Testing* jurisdiction over the *Athlete*.

- To meet these requirements, the responsible *ADO* is to set up a system that:
- Complies with the ISPPPI.
- Includes a mechanism for recording accurately and completely, by means of an audit trail, when an *Athlete* (or his/her Athlete Representative) inputs

information into the system, either at the beginning of a quarter or as an update during the quarter.

- Has in electronic format, and be capable of being accessed and searched by other *ADOs* remotely and securely.

The system should also allow tracking of information for intelligence purposes. For example, it should allow the responsible *ADO* to establish quickly and efficiently how often an *Athlete* is filing updates to his/her Whereabouts Filings.

The simplest way to establish such a system is to use *ADAMS* and its complementary mobile whereabouts app, which have been specifically designed to support *ADOs* in discharging their responsibilities (including their whereabouts responsibilities) under the *Code*.

In those rare cases where *ADAMS* cannot be used (e.g. online access isn't generally available for *RTP Athletes*), the responsible *ADO* may allow its *Athletes* to submit their Whereabouts Filings by post and/or fax or another approved system.

However, the responsible *ADO* remains responsible for making that information available to other *ADOs* with *Testing* jurisdiction over its *Athletes*, and therefore will have to enter the data from the Whereabouts Filing into a database that those *ADOs* can access and search remotely.

8.3.3 Education of *Athletes*

The responsible *ADO* (Whereabouts Custodian) should educate *Athletes* included in all whereabouts pools including the *RTP*, so they understand a) the whereabouts requirements they must satisfy; b) how the whereabouts system operated by the responsible *ADO* works; and c) how they can use that system to satisfy the whereabouts requirements imposed upon them.¹

This may include one or more of the following:

- An induction pack consisting of a user guide for *ADAMS* (or such other system as may be used), wallet card with emergency contact details, and whereabouts advice card.

[Comment: This should include full details on the Athletes' responsibilities and clearly outline the Consequences applicable if they Fail to Comply.]

- An offer of a face-to-face induction (education session) with trained personnel, including an explanation of the whereabouts requirements, a

¹ The obligation on the *Athlete* to file whereabouts information and the need to educate *Athletes* on how to use the whereabouts system are separate requirements, and one is not conditional on the other. More specifically, it is not a defense to an alleged Whereabouts Failure to claim that the *Athlete* did not receive sufficient training in how to use the whereabouts system.

demonstration of the *ADAMS* (or other applicable) system, and guidance on individual whereabouts issues (e.g. the most appropriate whereabouts information to suit a particular sport or individual).

- Online tutorial available to all *ADAMS* users with a step-by-step audio-visual demonstration of the *ADAMS* system.
- A dedicated phone line or similar service/system where trained personnel are available to answer questions within a reasonable time-frame.
- The *WADA*-enabled smart phone app to facilitate ongoing whereabouts updates.

In the lead up to a quarterly filing deadline, an *ADO* may send reminders (e.g. by email, or by SMS, or by using *ADAMS*' automatic "reminder" function) to *Athletes* in its *RTP* on the need to make a new Whereabouts Filing for the forthcoming quarter prior to the relevant deadline. However, once the filing deadline has passed, no further reminders or warnings may be given.

Instead, any failure to make an appropriate Whereabouts Filing by the deadline must be treated as an apparent Filing Failure, and any further failure to make the Whereabouts Filing having received notice of the first apparent Filing Failure must be treated as a second apparent Filing Failure.

8.3.4 Updating Whereabouts Information

Where a change in circumstances means that an *Athlete's* current Whereabouts Filing is no longer accurate or complete, such that it will not enable an *ADO* to locate the *Athlete* for *Testing* on a given day in the relevant quarter, the *Athlete* must update the Whereabouts Filing so that the information on file is again accurate and complete, or else risk a Missed Test or other ADRV.

The *Athlete* should update his/her Whereabouts Filing once the whereabouts information provided in it becomes outdated. The *Athlete* shouldn't wait until the last minute to update his/her information, unless unavoidable.

If the *Athlete* does delay, the responsible *ADO* should consider whether it is appropriate to charge him/her with an ADRV under Article 2.3 (evasion of *Sample* collection) and/or Article 2.5 (*Tampering* or *Attempted Tampering*).

The responsible *ADO* must ensure that any updates are made available without delay to other *ADOs* using the *Athlete's* Whereabouts Filing to locate the *Athlete* for *Testing*, so that those *ADOs* are able to plan their *Testing* missions accurately, and wasted efforts can be avoided.

Where *ADAMS* is used, updates can be made online, by SMS messaging (texting) and/or via the *WADA* smart phone app. In other systems, the options may also include updates by fax or email and/or leaving voicemail messages on a dedicated

number. In such circumstances the *ADO* will have to ensure that the updated information is transferred into the whereabouts database that is made accessible to other *ADOs*, so that they are made aware of any updated information when they come to plan their *Testing*.

The system should also enable the responsible *ADO* identify patterns of last-minute updates that should be investigated as possible evasion of *Sample* collection under *Code Article 2.3* and/or *Tampering* or *Attempted Tampering* with *Doping Control* under *Code Article 2.5*.

8.3.5 Team Sport and *In-Competition* Considerations

One consideration is whether the whereabouts information has to be provided by the *Athlete*, or alternatively whether it can be obtained from other sources.

For example, where *Competition* and/or training in a sport is organized and carried out on a collective basis rather than on an individual basis, involving Team Activities, an IF or *NADO* may (in its absolute discretion) decide that it is sufficient to collect whereabouts information from the *Athlete's* team during such periods of Team Activity, without requiring the *Athlete* to provide further information for those periods.

However, in periods where there are no Team Activities scheduled or where an *Athlete* is not participating in Team Activities, then the *Athlete* may be required to provide more individualized whereabouts to enable No Advance Notice Testing of the *Athlete* during these periods.

[Comment: This may include for example the provision of a 60-minute location for testing purposes, but only applicable during periods of injury, off-season, holidays, etc. where the athlete is no longer included in Team Activities.]

As the sole exception to *ISTI Article I.3.2*, if (but only if) there are dates in the relevant quarter in which the *Athlete* is scheduled to compete in an *Event* (excluding any *Events* organized by a *MEO*), **and** the *ADO* that put the *Athlete* into the *RTP* is satisfied that enough information is available from other sources to find the *Athlete* for *Testing* on those dates, then the *ADO* that put the *Athlete* into the *RTP* may waive the *ISTI Article I.3.2* requirement to specify a 60-minute timeslot in respect of such dates ("In-Competition Dates").

If the IF and *NADO* each put the *Athlete* into its *RTP*, the IF's decision to waive that requirement in respect of In-Competition Dates will prevail.

If the requirement to specify a 60-minute timeslot has been waived in respect of In-Competition Dates, and the *Athlete* has specified in his/her Whereabouts Filing a series of dates on which he/she anticipates being *In-Competition* (and as a result has not specified a 60-minute timeslot for those dates), if he/she is then eliminated from the *Competition* before the end of those dates, so that the remaining dates

are no longer *In-Competition Dates*, he/she must update his/her *Whereabouts Filing* to provide all the necessary information for those dates, including the 60-minute timeslot specified in Article I.3.2.

9.0 Effective *Doping Control* Operations

Testing is most effective when coordinated with other relevant *ADOs* to ensure that no unnecessary *Testing* occurs that would undermine the principle of efficient resource allocation. To this end, all *ADOs* are encouraged to utilise *ADAMS* to assess planned (where permissions are granted) and completed *Tests* by other *ADOs*. All *ADOs* are also encouraged to develop relationships with those *ADOs* with many *Athletes* of mutual interest to see that ongoing dialogue is in place to foster cooperation and coordination.

9.1 Objective

Where the appropriate relationships, agreements, and understandings are in place, *ADOs* should seek to establish working relationships that permit the sharing of *Athlete* whereabouts and intelligence/information. *Test* planning should take into consideration the plans of other *ADOs* (in terms of timing, frequency, type of *testing* and location) and where a high number of *Tests* on an individual is likely, reciprocal testing agreements and the sharing of full *Test* plans are encouraged.

9.2 Optimal Test Implementation

In planning a test based on an *Athlete's Whereabouts Filing* (be it *RTP* whereabouts or otherwise), the *ADO* needs to decide on the *Testing* strategy that will be most effective in deterring and detecting cheating. Keep in mind the guidance offered in the comment to ISTI Article I.4.1 on *Testing* inside and outside the 60-minute timeslot.

In particular, the *ADO* should bear in mind that the 60-minute time-slot is not a *Testing* window or a "default" period for *Testing*, but rather is designed to assist the *ADO* in locating the *Athlete* for *Testing* at any time.

The *Whereabouts Filing* will tell the *ADO* where the *Athlete* will be residing (i.e. sleeping overnight) on any given day, where and when he/she will be conducting any regular activities on that day, and a precise location where he/she will be for a 60-minute timeslot during that day.

Taking that information as a whole, the *ADO* should be able to plan a mission that aims to obtain a *Sample* from the *Athlete* outside the 60-minute timeslot, but with the guarantee of being able to get a *Sample* from him/her within the 60-minute timeslot if he/she can't be located elsewhere outside of that timeslot.

In ordinary circumstances, it is unlikely to be necessary to attempt to test *Athletes* between the hours of 11 pm and 6 am. It is recognized, however, that there may be exceptions to this, and the basic rule remains that an *Athlete* must submit for *Testing* if requested at any time. That said, the ADO should have sufficient cause (intelligence) to conduct testing during this overnight period with the notable exception of where an athlete has designated 05:00 as their 60-minute period.

The ADO should ensure that clear instructions that accurately reflect the ADO's *Testing* strategy are communicated clearly to the DCO who is going to attempt the test. It should also ensure that the DCO is given the most up-to-date information provided by the *Athlete* as to his/her whereabouts in the day(s) for which the *Testing* is planned.

This means checking (or having the DCO check) as close to the beginning of the mission as reasonably practicable whether or not the *Athlete* has filed any update to his/her most recent Whereabouts Filing for the day(s) in question.

The DCO instructed to undertake the *Testing* mission should include the following as part of his/her preparation:

- The DCO should ensure that he/she knows where the location specified is, how he/she is going to get there, and approximately how long it is going to take to get there.
- Where the location is a public one, e.g. a multi-sports complex, the DCO should make him/herself familiar in advance with the layout of the complex.
- The DCO should also ensure that he/she knows what the *Athlete* looks like, so that he/she can identify them when he/she gets to the specified location. ADOs should seek to make photographs of the *Athletes* available to their DCOs for this purpose.

9.2.1 Making a Reasonable *Testing* Attempt

An unsuccessful attempt to test an *Athlete* will not amount to a Missed Test unless the ADO on whose behalf the test was attempted can demonstrate to the comfortable satisfaction of the hearing panel that (among other things) the DCO made a reasonable attempt to locate the *Athlete* for *Testing* during the 60-minute timeslot specified for the day in question in the *Athlete's* Whereabouts Filing.

What constitutes a reasonable attempt to locate an *Athlete* for *Testing* during the 60-minute timeslot cannot be fixed in advance, as it will necessarily depend on the particular circumstances of the case in question, and in particular on the nature of the location chosen by the *Athlete* for that timeslot.

The only truly universal guideline is that the DCO should use his/her common sense. He/She should ask him/herself: "Given the nature of the location specified

by the *Athlete*, what do I need to do to ensure that if the *Athlete* is present, he/she will know that a DCO is here to collect a *Sample* from him/her?"

In this context, the DCO should bear in mind the requirement to avoid insofar as possible giving the *Athlete* advance notice of *Testing* that might provide an opportunity for *Tampering* or evasion or other improper conduct.

In certain circumstances, a degree of advance notice may simply be unavoidable. For example, an *Athlete* may live or train at a location where access is controlled by security personnel who will not permit access to anyone without first speaking to the *Athlete* or (for example) a team official.

This in itself is neither improper nor suspicious, but the DCO should be especially vigilant in such cases of any other circumstances which may be suspicious (such as a long delay between the security guard contacting the *Athlete* or team official and the DCO being given access to the *Athlete*). In this case, the DCO should provide a full report of such suspicious circumstances and should consider requiring the *Athlete* to give a second *Sample*.

The DCO does not necessarily have to be present at the location specified for the 60-minute time-slot from the beginning of the sixty minutes specified in order for the attempt to be reasonable. However, once he/she arrives at the location the DCO should remain at that location for whatever time is left of the 60-minute timeslot,² and the DCO should ensure that he/she allows sufficient time to make a reasonable attempt to locate the *Athlete* during that remaining time.

For example, if the location specified is a sports center, and the *Athlete* has said he/she will be in either the gym or the pool or the changing room, then the *Athlete* may need to check each of those possible places, and so it is likely that more time will be required to make a proper attempt than if the location specified is the *Athlete's* house.

*[Comment: The DCO should stay at the specified location for the remainder of the 60-minute timeslot even if he/she receives apparently reliable information that the *Athlete* will not be at the location during the 60-minute timeslot (e.g. because he/she is out of the country). This is to avoid any subsequent argument that the information received was in fact wrong and the *Athlete* turned up at the location after the DCO had left.]*

If the specified location is the *Athlete's* house or other place of residence, the DCO should ring any entry bell and knock on the door as soon as he/she arrives. If the *Athlete* does not answer, the DCO may telephone the *Athlete* to advise him/her of the attempt in the closing five minutes of the 60-minute period. Such a call is not

mandatory however, nor should it be used to invite the *Athlete* for *Testing*, but rather to potentially further validate that the *Athlete* is not present.

[Comment: If the Athlete merely specifies the sports center, and the number of potential locations within the sports center make it difficult for the DCO to find the Athlete within the 60-minute timeslot, the Athlete risks a Missed Test.]

Preferably, the DCO should wait somewhere close by (e.g. in his/her car) in a place where he/she can observe the (main) entrance to the residence. He/she should then knock/ring again a short time later (e.g. 15 minutes), and should keep doing so periodically until the end of the 60 minutes. At that point, he/she should try one last time at the end of the 60 minutes before leaving the location and completing an Unsuccessful Attempt Report.

If the DCO is told that the *Athlete* is not present at the specified location but can be found in an alternative location not far away, then the DCO should record this information (including the name, number and relationship to the *Athlete* of the person providing the information), but the DCO should not leave the specified location to go to try to find the *Athlete*, in case the *Athlete* is trying to get back to the specified location and the DCO misses him/her in transit.

Instead, the DCO should remain at the specified location for the remainder of the 60-minute timeslot. Thereafter, he/she is entitled to go to the alternative location (if so instructed by the *ADO*) to see if the *Athlete* can be located there for *Testing*. Even if that *Athlete* is located for *Testing* at the alternative location, however, and a *Sample* is collected, the *Athlete* is still liable for an apparent Missed Test and so the DCO should also provide an Unsuccessful Attempt Report to the *ADO*.

If the specified location for the 60-minute time-slot is a sports complex, it is the *Athlete's* responsibility to specify where in the complex he/she can be located. If the *Athlete* specifies a time when he/she knows he/she might be in one of several places within the location (e.g. the gym, or the treatment room, or the changing-room), he/she should name each of them in the Whereabouts Filing, and the DCO should visit each of the places named, in turn.

In such circumstances, the *Athlete* takes the risk that the DCO might miss him/her in transit, in which case the DCO should file an Unsuccessful Attempt Report and the *Athlete* may have a Missed Test declared against him/her.

If the *Athlete* only specifies the sports complex for his/her 60-minute time-slot, and does not specify *where* in the sports complex he/she will be during the 60-minute timeslot, the DCO should make reasonable attempts to check each of the locations where the *Athlete* may be within the complex, but if notwithstanding those attempts the *Athlete* cannot be found then the DCO should file an Unsuccessful Attempt Report and the *Athlete* may have a Missed Test declared against him/her.

If there is a Public Address (PA) system at the venue, the DCO should consider asking for an announcement to be made, telling the *Athlete* to report to a particular meeting point, but without announcing the reason for the request. If necessary, that announcement could then be repeated at regular intervals for the remainder of the 60-minute timeslot.

Whatever the location specified, it may be appropriate for the DCO to speak to people he/she encounters during the attempt to see if they can assist in locating the *Athlete*. If so, the DCO should try to get the names and positions (e.g. neighbour, coach, receptionist) of the people with whom he/she speaks, for recording (along with relevant details of the conversations) on the Unsuccessful Attempt Report. The DCO should not identify the purpose of his/her visit, unless necessary for safety or security reasons.

The DCO should note any circumstances he/she observes during his/her attempt to test the *Athlete* that could be relevant.

For example, if the attempt is made at the *Athlete's* home, and no one answers the door, the DCO should note whether or not there are any lights on in the house, or if he/she notices any movement in the house. If there is a car in the driveway, the DCO might note the make/colour/licence plate number, and check whether the engine hood is warm, indicating that the car has been used recently. It is up to the DCO to gather such anti-doping intelligence as may be useful to the *ADO*. This information should be included in the Unsuccessful Attempt Report.

If the DCO locates the *Athlete* and is able to collect a *Sample* from him/her, but has suspicions of possible manipulation or *Tampering*, the DCO may require the *Athlete* to provide a second *Sample* (and further *Samples* if necessary) after the first. An example might be circumstances where it appears that the *Athlete* knew of the DCO's presence at the specified location early in the hour, but the *Athlete* did not make himself/herself available for *Testing* until late in the hour.

If the DCO is unable to locate the *Athlete* during the 60-minute timeslot, he/she should complete and submit an Unsuccessful Attempt Form to the *ADO* that ordered the mission as soon as possible, and in any event no more than three working days after the attempt.

The DCO should provide a detailed account in the Unsuccessful Attempt Report of exactly what he/she did during the 60-minute timeslot to try to find the *Athlete*. For example, if the attempt was at the *Athlete's* home, the DCO should note when and how many times he knocked on the door, where he/she waited in between attempts, etc). The DCO should specify exactly where he/she went, for how long, what he/she did, who he/she spoke to about where the *Athlete* might be (including the names of the people involved, and what was said).

9.3 Smart Testing

All ADOs responsible for conducting *Testing* should seek to implement measures to ensure that wherever possible, *Testing* is planned and conducted according to the principles of smart *Testing*.

Smart *Testing* requires that the overall TDP and its constituent tests are directed according to some reasonable known or potential risk relating to the *Athlete*, and are planned according to when it is considered (according to the type of risk) that the test and chosen test type (e.g. blood, urine, profiling, ESAs, etc.) would be most effective in terms of detection and deterrence.

At its most basic level, smart *Testing* is anything contributing to test planning and conduct that would make a test likely to be more effective than if it were (i) directed solely via Random Selection of Athletes, and (ii) timed randomly during the *Athlete's* competitive or training calendar.

Smart *Testing* can range from the use of simple risk indicators such as suspicious behaviour identified at a *Doping Control*, to a credible tip-off, to using analytical intelligence that suggests that an *Athlete* may intentionally be trying to manipulate an ABP. Smart *Testing* should replace all Random Selection Testing of Athlete wherever possible.

The use of smart *Testing* to target an *Athlete* can never itself be considered an indicator that the *Athlete* is doping or has doped. However an ADO should be free to use any data that may potentially help make a test more effective as part of its test distribution strategy.

9.3.1 Collection of Intelligence during Sample Collection

DCOs should be encouraged and reminded at regular intervals to be aware of potential information that they may obtain whilst conducting a Sample Collection Session, e.g. the behaviour or appearance of an *Athlete*, comments made during the test, suspicious activity from the *Athlete* or *Athlete Support Personnel*, information on training activities, etc.

Any such information should be clearly documented by the DCO and communicated back to the ADO be it via a Supplementary Report Form, an email or telephone call etc. Something that may not on the surface be of particular note or significance to them could become a much valued piece of information when added to any other intelligence already held by the ADO.

9.3.2 Information collected by Sample Collection Personnel

The ADO should inform its DCOs of anything that may be witnessed as part of a *Doping Control* that could potentially be considered useful to the ADO in achieving a smarter *Testing* plan.

This would primarily involve identifying suspicious behaviour by *Athletes* and *Athlete Support Personnel*, but may also include visual clues that the DCO may collect as part of their operations. The ADO should implement a means for DCOs to record such information and confidentially report back to the ADO.

This may include, but is not limited to:

- Over-hydration during urine *Testing*, particularly after having been requested not to do so by a DCO.
- Refusal to rest or remain still for the required period prior to a blood test.
- *Attempts* to prevent the DCO clearly witnessing *Sample* provision whilst in the toilet, which could include reluctance to appropriately remove clothing or the *Athlete* positioning themselves in such a way as to obstruct the DCO's view.
- Consumption of tablets and/or medication by the *Athlete* at any point from completion of training or *Competition* and the start of the Sample Collection Session.
- The *Athlete* intentionally delaying the start of the Sample collection Session without good reason.
- Unusual/inappropriate medical equipment carried by an *Athlete's* doctor or a team doctor.
- Noticing discarded medical equipment in changing rooms (e.g. syringes).
- Information on *Athletes* who may have departed the venue upon being alerted to the presence of Sample Collection personnel.
- An *Athlete* seeking to evade or distract a Chaperone from performing their duties.
- Not following instructions to clean hands prior to *Sample* provision.
- Suspicious bruising indicative of possible injections/transfusions.
- Disruptive *Athlete Support Personnel* during the Sample Collection Session.

9.3.3 Data collected by ADOs

The ADO should also aim to review and monitor data collected from *Doping Controls* that may help identify patterns from an *Athlete's Doping Control* records that may not be identified by a DCO. This may include:

- Repeated provision of first *Samples* that fail to meet the required Suitable Specific Gravity for Analysis or consistently provide no more than minimum required volume vs. a Suitable Volume of Urine for Analysis;
- Repeated failure to respond to the notification attempts of a DCO until the final minutes of the *Athlete's* one-hour window;
- Repeated delays between initial notification attempts and "in-person" notification;
- Persistent and /or repeated behaviour by the same *Athlete/Athlete Support Personnel* during *Sample* collection that may indicate an intention to obstruct or subvert the *Doping Control Process*. This could include factors such as minor obstruction of DCOs/Chaperones, or simple repeated Failure to Comply with DCO on reasonable requests to assist with the *Doping Control Process*;
- Persistent and /or repeated behaviour by the same team, player or team support personnel during *Sample* collection that may indicate an intention to obstruct or subvert the *Doping Control Process*;
- Credible information received from a "tip" line or other legitimate communication channel.

9.3.4 Target Testing

The ADO shall use *Target Testing* as its primary means of *Athlete* selection whenever data is available to make *Target Testing* potentially more effective than Random Selection. *Target Testing* should be tailored specifically to the *Athlete* in question in terms of the type of test and timing of the test, and can include any of the following:

- *Target Testing* of an individual *Athlete* with specific type of analysis
- Targeting of a group of *Athletes* or a team (where data suggests that the risk may be within a group but no specific *Athlete* is identified)
- *Target Testing* of injured *Athletes* at periods when the *Use of Prohibited Substances* could potentially speed recovery.
- In team sports, where teams consist of a large squad of players, and where no smart data is available on any one player, random selection from a smaller targeted pool of *Athletes* may help to increase the likelihood of

ensuring that elite players are tested, e.g. selecting a smaller pool of first team players from which to conduct Random Selection.

- Use of specific *Testing* such as ESAs/IRMS/Growth Hormone/HBOCs, etc. according to the smart data available on the *Athlete*
- Including an *Athlete* in a biological profile program where the available smart data/intelligence may suggest that such a program could increase the chances of detecting doping.

Care should always be exercised when an *ADO* has a large pool of *Athletes* to cover with its TDP and no obvious knowledge/evidence of where risk may exist within the pool. Some Random (structured) Selection may be required within a group on which little smart *Testing* data exists, to ensure that all in the group have the possibility of being tested (a combination of random and *Targeted Testing*).

9.3.5 Timing of *Testing*

The *ADO* must aim to time its *Testing* using as much available data and intelligence as possible to maximize deterrence and the chances of detection, according to the type of doping offence the *Athlete* or group of *Athletes* may be considered at risk of committing.

This may include:

- Timing *Testing* according to known/common *Administration*, and known excretion patterns for a substance that an *Athlete* could potentially be using.
- Timing *Testing* at times which would be least predictable for the *Athlete* and which would allow a doping *Athlete* the least opportunity to avoid being tested, or to obstruct or delay *Testing* or to *Attempt* to manipulate their *Sample*.
- Timing a biological profile test according to the scientific direction of an APMU or Expert Panel.
- Repeated *Testing* over a short period, or focusing *Testing* at times when the *Athlete* may least expect to be tested, according to previous testing patterns.
- Conducting an effective pre-*Event Testing* program that tests *Athletes* regularly for a sufficient period of time in advance of the *Competition* to detect pre-*Event* doping strategies that would not be detected solely by *In-Competition Testing* at the *Event*. This may also include the qualifying *Event* itself and the period beforehand, where incentives to cheat may be increased.

While considering as best as possible the schedule of an *Athlete* and the possible imposition of *Doping Control*, the timing of *Testing* should only ever take into

account the inconvenience to the *Athlete*, team and their entourage/officials, if this has no impact on the likely effectiveness of the test.

In all other circumstances, the effective timing of the test should be the key factor and doing otherwise minimizes test effectiveness and in so doing does all *Athletes* a disservice.

To identify the best time to attempt to test an *Athlete* in detail, any intelligence held on an *Athlete* should be overlaid with the information held on the type of substance(s) that the *Athlete* might be abusing, and the times that they are likely to be taking this substance, e.g. steroids are more likely to *Used* in the months/weeks leading up to a *Competition* than in the days beforehand.

[Comment: ADOs targeting an Athlete with good cause should review the days of the week, times of day, etc. that attempts are made to ensure variety and not become predictable.]

9.3.6 Analytical Intelligence

ADOs are always encouraged to maintain a dialogue with WADA-accredited Laboratories and APMUs to ensure their plans are informed by the latest scientific techniques and strategies.

Analytical intelligence can take any of the following forms:

- Laboratory analytical data which may not reveal an *AAF*, but which may provide sufficient suspicion of potential doping.
- Suspicious biological profile, such as atypical results requiring further investigation.
- Presence of alcohol or medication that may influence a biological profile, or affect a Laboratory's ability to make a clear analysis.
- Identification of biological *Markers* in a *Sample* that are consistent with doping, but which a Laboratory cannot clearly determine via current analytical methods.
- Identification of plasticisers in a *Sample*.

WADA-accredited Laboratories sit on a wealth of intelligence such as on substances that whilst not reaching the reporting threshold are detectable in an *Athlete's Sample*, substances which they can test for, but don't as a matter of routine (e.g. plasticizers).

To leverage the full expertise of WADA-accredited Laboratories, ADOs must establish ongoing communications so these "value-added" services can improve the intelligence of day-to-day test planning.

9.3.7 Optimizing Available Resources

In addition to maximizing the effectiveness of *Testing* itself, *ADOs* may also wish to consider ways and means of maximizing the return on their expenditures so that financial resources are freed to spend in an optimal way. This may include, re-allocating resources towards increased *Testing*, special *Analysis*, expanding an *ABP* program, or perhaps further *Athlete* Education. How might an *ADO* find potential savings in their *anti-doping* operations without jeopardizing the quality and effectiveness of their program?

A few suggestions follow:

- *ADOs* should consider combined missions with other *ADOs* where *Athletes* of varied nationalities may be training together especially in remote locations where travel costs may be excessive (to share personnel and courier costs).
- *ADOs* should evaluate Laboratory prices (available in *ADAMS*) **combined** with courier costs to evaluate possible savings by using a Laboratory that is not necessarily the closest one.
- Train certified phlebotomists to act as DCOs.
- *NADOs* are encouraged to establish reciprocal testing agreements with other relevant *ADOs* (*Testing* foreign athletes on behalf of foreign *NADOs* in exchange for reciprocal services).
- *ADOs* should evaluate the costs to hire full time DCOs who would be “on call” as opposed to part-time and volunteer DCOs who may have limited availability, and consequently may not be available at the most effective times to *Test*.
- Use the free and compliant templates that are available in *WADA’s* Results Management, Hearings and Decisions Guidelines to minimize avoidable legal costs.
- Consider the adoption of paperless *Doping Control* (to benefit from long-term shipping and printing savings).
- Minimize the collection of dilute *Samples* (and applicable equipment costs) through education of *Doping Control Personnel* as it relates to adequate hydration.

10.0 Doping Control Reporting

The *Code* requires that all *ADOs* at least annually publish a general statistical report of their *Doping Control* activities. *ADAMS* is the logical and most efficient way to comply with this requirement given that daily entry of data will ensure that such

reports can be generated in an automated fashion. These *Guidelines* are an opportunity to promote increased standardization in the way that such information in order to improve the transparency of *ADO* programs, and improve the available data upon which to measure and evaluate *Testing* program effectiveness.

10.1 Public Reporting of *Doping Control* Data

The perceived quality or robustness of *Doping Control* programs is often viewed by the number of *Tests* that have been conducted; this perspective is flawed. When *Test* numbers are made public, or promoted as the measure of the strength of a program, focus for *ADOs* becomes adherence to these figures. Focus on the quantity of *Tests* or *Samples* collected should be re-directed towards quality, and ensuring that risks have been assessed adequately, and that *Testing* and *Analysis* has been applied intelligently.

To this end, public reporting of *Doping Control* data should adopt a more harmonized approach to the 'accounting' of *Testing* figures. Currently, the manner in which many *ADOs* report on the number of *Tests* conducted is inconsistent. Some count the number of *Sample Types* (i.e. *Urine* and *Blood*) collected, meaning that a *Urine* and *Blood Test* from the same *Athlete* during the same collection session would be claimed to be two *Tests*. Other *ADOs* may include *ABP Tests* into their figures as additional *Tests*, arguably meaning three *Tests* have now been collected.

Other *ADOs* may also cumulatively include dilute *Samples* in their public reporting as well as adding those *Samples* that were *Analysed* for non-Routine *Substances and Methods* (i.e. *ESAs*, *IRMS*) resulting in a false impression that a greater number of *Tests* have taken place than is actually the case. Without standardized reporting practices therefore, it is a challenge to compare and evaluate the size and scope of various *Anti-Doping* programs, thereby undermining efforts to communicate *Anti-Doping* efforts in a clear and easy to understand manner for *ADOs* and the public alike.

These *Guidelines* therefore recommend that in complying with *Code Article 14.4* regarding the publication of *Doping Control* activities, such annual reports should include at a minimum the following data:

- The number of total *Tests* as defined by these *Guidelines* – i.e. the number of single *Sample Collection Sessions* that have been conducted on an individual *Athlete* (for the purposes of direct analysis).

[Comment: This means for example that a Sample Collection Session in which one urine Sample and two blood Samples were collected and analysed for GH and ESAs will count as one Test. ABP Samples collected alone without "traditional" analyses are not considered tests.]

- The number of *Athletes* the aforementioned *Tests* applied to. For example, how many *Athletes* were *Tested* once, twice, three times and so on.
- The number of total *Samples collected* with an explanation of how many of these *Samples* may have been dilute (from the same *Athlete*) including how many of these dilute *Samples* were *Analysed*.
- The number of *Tests* and *Samples* collected both *In* and *Out of Competition*.
- A detailed summary of all *Analyses* performed for non-Routine Analysis such as for ESAs, GHRFs, GH, HBOCs Insulins, and Homologous Transfusions.

ADAMS has the full capacity to monitor these figures regularly and to report all *Samples*, *Analysis Types* and other such details from *Laboratory* results. ADAMS provides access to this data to the *Testing Authority* and to WADA. WADA's annual publication of global *Doping Control* data (published on the WADA web-site) summarizes this information in detail.

ADOs are encouraged however to publish their own such reports (in accordance with Code Article 14.4) with additional information on how such *Samples* relate to the number of *Tests* conducted (the number of actual *Athletes*). This is particularly important for ADOs that do not use ADAMS given that WADA is not in a position to attribute unique *Tests* to individual athletes without all *Doping Control Forms* being entered by all ADOs to match with available *Laboratory* results, and in so doing providing a full and detailed account of global *Doping Control* activity. All ADOs are also strongly urged to publish details on the outcomes of all *Doping Controls* (i.e. the number of AAFs, applicable TUEs, subsequent ADRV information) so that TDP outcomes can be examined to identify areas of risk that can guide the next *Test Distribution Planning* exercise as set out in Section 5 of these *Guidelines*. Such information should also be made available to ADAMS so that a comprehensive account of *Doping Control* activities is available.

11.0 Definitions

11.1 2015 Code Defined Terms

ADAMS: The Anti-Doping Administration and Management System is a Web-based database management tool for data entry, storage, sharing, and reporting designed to assist stakeholders and WADA in their anti-doping operations in conjunction with data protection legislation.

Administration: Providing, supplying, supervising, facilitating, or otherwise participating in the *Use* or *Attempted Use* by another *Person* of a *Prohibited Substance* or *Prohibited Method*. However, this definition shall not include the actions of bona fide medical personnel involving a *Prohibited Substance* or

Prohibited Method used for genuine and legal therapeutic purposes or other acceptable justification and shall not include actions involving *Prohibited Substances* which are not prohibited in *Out-of-Competition Testing* unless the circumstances as a whole demonstrate that such *Prohibited Substances* are not intended for genuine and legal therapeutic purposes or are intended to enhance sport performance.

Adverse Analytical Finding (AAF): A report from a WADA-accredited laboratory or other WADA-approved laboratory that, consistent with the International Standard for Laboratories and related Technical Documents, identifies in a *Sample* the presence of a *Prohibited Substance* or its *Metabolites* or *Markers* (including elevated quantities of endogenous substances) or evidence of the *Use* of a *Prohibited Method*.

Anti-Doping Organization (ADO): A *Signatory* that is responsible for adopting rules for initiating, implementing or enforcing any part of the *Doping Control* process. This includes, for example, the International Olympic Committee, the International Paralympic Committee, other *Major Event Organizations* that conduct *Testing* at their *Events*, WADA, International Federations, and *National Anti-Doping Organizations*.

Athlete: Any *Person* who competes in sport at the international level (as defined by each International Federation) or the national level (as defined by each *National Anti-Doping Organization*). An *Anti-Doping Organization* has discretion to apply anti-doping rules to an *Athlete* who is neither an *International-Level Athlete* nor a *National-Level Athlete*, and thus to bring them within the definition of "Athlete." In relation to *Athletes* who are neither *International-Level* nor *National-Level Athletes*, an *Anti-Doping Organization* may elect to: conduct limited *Testing* or no *Testing* at all; analyze *Samples* for less than the full menu of *Prohibited Substances*; require limited or no whereabouts information; or not require advance *TUEs*. However, if an Article 2.1, 2.3 or 2.5 anti-doping rule violation is committed by any *Athlete* over whom an *Anti-Doping Organization* has authority who competes below the international or national level, then the *Consequences* set forth in the *Code* (except Article 14.3.2) must be applied. For purposes of Article 2.8 and Article 2.9 and for purposes of anti-doping information and education, any *Person* who participates in sport under the authority of any *Signatory*, government, or other sports organization accepting the *Code* is an *Athlete*.

[Comment to Athlete: This definition makes it clear that all International- and National-Level Athletes are subject to the anti-doping rules of the Code, with the precise definitions of international- and national-level sport to be set forth in the anti-doping rules of the International Federations and National Anti-Doping Organizations, respectively. The definition also allows each National Anti-Doping Organization, if it chooses to do so, to expand its anti-doping program beyond International- or National-Level Athletes to competitors at lower levels of

Competition or to individuals who engage in fitness activities but do not compete at all. Thus, a National Anti-Doping Organization could, for example, elect to test recreational-level competitors but not require advance TUEs. But an anti-doping rule violation involving an Adverse Analytical Finding or Tampering, results in all of the Consequences provided for in the Code (with the exception of Article 14.3.2). The decision on whether Consequences apply to recreational-level Athletes who engage in fitness activities but never compete is left to the National Anti-Doping Organization. In the same manner, a Major Event Organization holding an Event only for masters-level competitors could elect to test the competitors but not analyze Samples for the full menu of Prohibited Substances. Competitors at all levels of Competition should receive the benefit of anti-doping information and education.]

Athlete Biological Passport (ABP): The program and methods of gathering and collating data as described in the International Standard for Testing and Investigations and International Standard for Laboratories.

Athlete Support Personnel: Any coach, trainer, manager, agent, team staff, official, medical, paramedical personnel, parent or any other *Person* working with, treating or assisting an *Athlete* participating in or preparing for sports *Competition*.

Attempt: Purposely engaging in conduct that constitutes a substantial step in a course of conduct planned to culminate in the commission of an anti-doping rule violation. Provided, however, there shall be no anti-doping rule violation based solely on an *Attempt* to commit a violation if the *Person* renounces the *Attempt* prior to it being discovered by a third party not involved in the *Attempt*.

Atypical Finding (ATF): A report from a WADA-accredited laboratory or other WADA-approved laboratory which requires further investigation as provided by the International Standard for Laboratories or related Technical Documents prior to the determination of an *Adverse Analytical Finding*.

Code: The World Anti-Doping Code.

Competition: A single race, match, game or singular sport contest. For example, a basketball game or the finals of the Olympic 100-meter race in athletics. For stage races and other sport contests where prizes are awarded on a daily or other interim basis the distinction between a *Competition* and an *Event* will be as provided in the rules of the applicable International Federation.

Consequences of Anti-Doping Rule Violations (Consequences): An *Athlete's* or other *Person's* violation of an anti-doping rule may result in one or more of the following: (a) Disqualification means the *Athlete's* results in a particular *Competition* or *Event* are invalidated, with all resulting *Consequences* including forfeiture of any medals, points and prizes; (b) Ineligibility means the *Athlete* or other *Person* is barred on account of an anti-doping rule violation for a specified

period of time from participating in any *Competition* or other activity or funding as provided in Article 10.12.1; (c) *Provisional Suspension* means the *Athlete* or other *Person* is barred temporarily from participating in any *Competition* or activity prior to the final decision at a hearing conducted under Article 8; (d) *Financial Consequences* means a financial sanction imposed for an anti-doping rule violation or to recover costs associated with an anti-doping rule violation; and (e) *Public Disclosure or Public Reporting* means the dissemination or distribution of information to the general public or *Persons* beyond those *Persons* entitled to earlier notification in accordance with Article 14. Teams in *Team Sports* may also be subject to *Consequences* as provided in Article 11.

Disqualification: See *Consequences of Anti-Doping Rule Violations* above.

Doping Control: All steps and processes from test distribution planning through to ultimate disposition of any appeal including all steps and processes in between such as provision of whereabouts information, *Sample* collection and handling, laboratory analysis, *TUEs*, results management and hearings.

Event: A series of individual *Competitions* conducted together under one ruling body (e.g., the Olympic Games, FINA World Championships, or Pan American Games).

In-Competition: Unless provided otherwise in the rules of an International Federation or the ruling body of the *Event* in question, “*In-Competition*” means the period commencing twelve hours before a *Competition* in which the *Athlete* is scheduled to participate through the end of such *Competition* and the *Sample* collection process related to such *Competition*.

[Comment to In-Competition: An International Federation or ruling body for an Event may establish an "In-Competition" period that is different than the Event Period.]

Ineligibility: See *Consequences of Anti-Doping Rule Violations* above.

International Event: An *Event* or *Competition* where the International Olympic Committee, the International Paralympic Committee, an International Federation, a *Major Event Organization*, or another international sport organization is the ruling body for the *Event* or appoints the technical officials for the *Event*.

International-Level Athlete: *Athletes* who compete in sport at the international level, as defined by each International Federation, consistent with the International Standard for Testing and Investigations.

[Comment to International-Level Athlete: Consistent with the International Standard for Testing and Investigations, the International Federation is free to determine the criteria it will use to classify Athletes as International-Level Athletes, e.g., by ranking, by participation in particular International Events, by type of

license, etc. However, it must publish those criteria in clear and concise form, so that Athletes are able to ascertain quickly and easily when they will become classified as International-Level Athletes. For example, if the criteria include participation in certain International Events, then the International Federation must publish a list of those International Events.]

International Standard: A standard adopted by WADA in support of the Code. Compliance with an *International Standard* (as opposed to another alternative standard, practice or procedure) shall be sufficient to conclude that the procedures addressed by the *International Standard* were performed properly. *International Standards* shall include any Technical Documents issued pursuant to the *International Standard*.

Major Event Organizations: The continental associations of *National Olympic Committees* and other international multi-sport organizations that function as the ruling body for any continental, regional or other *International Event*.

Marker: A compound, group of compounds or biological variable(s) that indicates the *Use of a Prohibited Substance or Prohibited Method*.

National Anti-Doping Organization (NADO): The entity(ies) designated by each country as possessing the primary authority and responsibility to adopt and implement anti-doping rules, direct the collection of *Samples*, the management of test results, and the conduct of hearings at the national level. If this designation has not been made by the competent public authority(ies), the entity shall be the country's *National Olympic Committee* or its designee.

National-Level Athlete: *Athletes* who compete in sport at the national level, as defined by each *National Anti-Doping Organization*, consistent with the *International Standard for Testing and Investigations*.

National Olympic Committee (NOC): The organization recognized by the *International Olympic Committee*. The term *National Olympic Committee* shall also include the *National Sport Confederation* in those countries where the *National Sport Confederation* assumes typical *National Olympic Committee* responsibilities in the anti-doping area.

Out-of-Competition: Any period which is not *In-Competition*.

Prohibited List: The List identifying the *Prohibited Substances* and *Prohibited Methods*.

Prohibited Method: Any method so described on the *Prohibited List*.

Prohibited Substance: Any substance, or class of substances, so described on the *Prohibited List*.

Provisional Suspension: See *Consequences of Anti-Doping Rule Violations* above.

Publicly Disclose or Publicly Report: See *Consequences of Anti-Doping Rule Violations* above.

Registered Testing Pool (RTP): The pool of highest-priority *Athletes* established separately at the international level by International Federations and at the national level by *National Anti-Doping Organizations*, who are subject to focused *In-Competition* and *Out-of-Competition Testing* as part of that International Federation's or *National Anti-Doping Organization's* test distribution plan and therefore are required to provide whereabouts information as provided in Article 5.6 and the International Standard for Testing and Investigations.

Sample or Specimen: Any biological material collected for the purposes of *Doping Control*.

[Comment to Sample or Specimen: It has sometimes been claimed that the collection of blood Samples violates the tenets of certain religious or cultural groups. It has been determined that there is no basis for any such claim.]

Tampering: Altering for an improper purpose or in an improper way; bringing improper influence to bear; interfering improperly; obstructing, misleading or engaging in any fraudulent conduct to alter results or prevent normal procedures from occurring.

Target Testing: Selection of specific *Athletes* for *Testing* based on criteria set forth in the International Standard for Testing and Investigations.

Team Sport: A sport in which the substitution of players is permitted during a *Competition*.

Testing: The parts of the *Doping Control* process involving test distribution planning, *Sample* collection, *Sample* handling, and *Sample* transport to the laboratory.

Use: The utilization, application, ingestion, injection or consumption by any means whatsoever of any *Prohibited Substance* or *Prohibited Method*.

WADA: The World Anti-Doping Agency.

11.2 ISTI Defined Terms

Athlete Representative: A person designated by the *Athlete* to assist with the verification of the *Sample* collection procedure, (not including the passing of the *Sample*). This person may be a member of the *Athlete's Support Personnel*, such as a coach or team doctor, a family member, or other. For *In-Competition Testing* the *Athlete Representative* must have the appropriate accreditation to access the *Doping Control Station*.

Chaperone: An official who is trained and authorized by the Sample Collection Authority to carry out specific duties including one or more of the following (at the election of the Sample Collection Authority): notification of the *Athlete* selected for *Sample* collection; accompanying and observing the *Athlete* until arrival at the Doping Control Station; accompanying and/or observing *Athletes* who are present in the Doping Control Station; and/or witnessing and verifying the provision of the *Sample* where the training qualifies him/her to do so.

Code Article 2.4 Whereabouts Requirements: The whereabouts requirements set out in Annex I of the International Standard for Testing and Investigations, which apply to *Athletes* who are included in the *Registered Testing Pool* of an International Federation or a *National Anti-Doping Organization*.

Doping Control Officer (DCO): An official who has been trained and authorized by the Sample Collection Authority to carry out the responsibilities given to DCOs in the International Standard for Testing and Investigations.

Failure to Comply: A term used to describe anti-doping rule violations under *Code* Articles 2.3 and/or 2.5.

Filing Failure: A failure by the *Athlete* (or by a third party to whom the *Athlete* has delegated the task) to make an accurate and complete Whereabouts Filing that enables the *Athlete* to be located for *Testing* at the times and locations set out in the Whereabouts Filing or to update that Whereabouts Filing where necessary to ensure that it remains accurate and complete, all in accordance with Article I.3 of the International Standard for Testing and Investigations.

In-Competition Date: As defined in Article I.3.3.

Missed Test: A failure by the *Athlete* to be available for *Testing* at the location and time specified in the 60-minute time slot identified in his/her Whereabouts Filing for the day in question, in accordance with Article I.4 of the International Standard for Testing and Investigations.

No Advance Notice Testing: *Sample* collection that takes place with no advance warning to the *Athlete* and where the *Athlete* is continuously chaperoned from the moment of notification through *Sample* provision.

Random Selection: Selection of *Athletes* for *Testing* which is not *Target Testing*.

Sample Collection Personnel: A collective term for qualified officials authorized by the Sample Collection Authority to carry out or assist with duties during the Sample Collection Session.

Sample Collection Session: All of the sequential activities that directly involve the *Athlete* from the point that initial contact is made until the *Athlete* leaves the Doping Control Station after having provided his/her *Sample(s)*.

Suitable Specific Gravity for Analysis: Specific gravity measured at 1.005 or higher with a refractometer, or 1.010 or higher with lab sticks.

Suitable Volume of Urine for Analysis: A minimum of 90 mL, whether the laboratory will be analysing the *Sample* for all or only some *Prohibited Substances* or *Prohibited Methods*.

Team Activity/Activities: Sporting activities carried out by *Athletes* on a collective basis as part of a team (e.g., training, travelling, tactical sessions) or under the supervision of the team (e.g., treatment by a team doctor).

Test Distribution Plan (TDP): A document written by an *Anti-Doping Organization* that plans *Testing* on *Athletes* over whom it has *Testing Authority*, in accordance with the requirements of Article 4 of the International Standard for Testing and Investigations.

Testing Authority: The organization that has authorized a particular *Sample* collection, whether (1) an *Anti-Doping Organization* (for example, the International Olympic Committee or other *Major Event Organization*, WADA, an International Federation, or a *National Anti-Doping Organization*); or (2) another organization conducting *Testing* pursuant to the authority of and in accordance with the rules of the *Anti-Doping Organization* (for example, a National Federation that is a member of an International Federation).

Unsuccessful Attempt Report: A detailed report of an unsuccessful attempt to collect a *Sample* from an *Athlete* in a *Registered Testing Pool*, setting out the date of the attempt, the location visited, the exact arrival and departure times at the location, the steps taken at the location to try to find the *Athlete* (including details of any contact made with third parties), and any other relevant details about the attempt.

Whereabouts Failure: A *Filing Failure* or a *Missed Test*.

Whereabouts Filing: Information provided by or on behalf of an *Athlete* in a *Registered Testing Pool* that sets out the *Athlete's* whereabouts during the following quarter, in accordance with ISTI Article I.3 of the International Standard for Testing and Investigations.

11.3 Guidelines for Implementing an Effective *Testing* Program Defined Terms

Expert Panel: The *Experts*, with knowledge in the concerned field, chosen by the *Anti-Doping Organization* and/or *Athlete Passport Management Unit*, who are responsible for providing an evaluation of the *Passport*. For the Haematological Module, *Experts* should have knowledge in one or more of the fields of clinical haematology (diagnosis of blood pathological conditions), sports medicine or

exercise physiology. For the Steroidal Module, the Experts should have knowledge in Laboratory analysis, steroid doping and/or endocrinology.

The Panel may include a pool of appointed Experts and any additional ad hoc Expert(s) who may be required upon request of any of the appointed Experts or by the Athlete Passport Management Unit of the *Anti-Doping Organization*.

general pool: A large pool of *Athletes* that an *ADO* may test at any time, and require minimal whereabouts information, often on a collective basis, with little or no *Consequence* for Failure to Comply to provide such information.

non-analytical: The anti-doping rule violations set out in Article 2.2, Article 2.3, Article 2.4, Article 2.5, Article 2.6, Article 2.7, Article 2.8, Article 2.9 and Article 2.10 of the *Code*.

Passport: A collation of all relevant data unique to an individual *Athlete* that may include longitudinal profiles of *Markers*, heterogeneous factors unique to that particular *Athlete* and other relevant information that may help in the evaluation of *Markers*.

routine analysis: The basic substances (and methods where applicable) that are analyzed in all urine *Samples* by WADA-accredited Laboratories. This includes all Prohibited Substances, with the exception of ESAs, GHRFs, GH, HBOCs Insulins, and both Autologous and Homologous Transfusions.

test: Any number of *Samples* that have been collected from one *Athlete* during a single Sample Collection Session for the purposes of direct analysis.

[Comment to Test: For example, a Sample Collection Session in which one urine Sample and two blood Samples are collected will count as one Test. ABP Samples collected alone without "traditional" analyses are not considered tests.]

Testing pool: The pool of highest priority *Athletes* established by an *ADO* that are not subject to 2.4 of the *Code*, but are be required to provide whereabouts information to support *Out-of-Competition Testing*, and to whom *Consequences* shall apply for Failure to Comply to provide such information.

Whereabouts Custodian: The responsible *ADO* with whom an *Athlete* must provide their Whereabouts Filing and who has the responsibility to share this information with other authorized *ADOs*, and pursue Whereabouts Failures in accordance with the requirements of ISTI Annex I.

11.4 ISL Defined Terms

Athlete Passport Management Unit (APMU): A unit composed of a *Person* or *Persons*, designated by the *Anti-Doping Organization*, responsible for the administrative management of the *Passports* advising the *Anti-Doping Organization* for intelligent, *Targeted Testing* liaising with the Expert Panel compiling and

authorizing an *Athlete Biological Passport* Documentation Package and reporting *Adverse Passport Findings*.

Confirmation Procedure: An analytical test procedure whose purpose is to identify the presence or to measure the concentration/ratio of one or more specific *Prohibited Substances*, *Metabolite(s)* of a *Prohibited Substance*, or *Marker(s)* of the *Use of a Prohibited Substance or Method in a Sample*.

[Comment: A *Confirmation Procedure* for a *threshold substance* shall also indicate a concentration/ratio of the *Prohibited Substance* greater than the applicable *Decision Limit* (as noted in the TD *DL*).]

International Standard for Laboratories (ISL): The International Standard applicable to *Laboratories* as set forth herein.

Laboratory(ies): WADA-accredited laboratory(ies) applying test methods and processes to provide evidentiary data for the detection of *Prohibited Substances*, *Methods* or *Markers* on the *Prohibited List* and, if applicable, quantification of a *Threshold Substance* in *Samples* of urine and other biological matrices in the context of anti-doping activities.

11.5 ISPPPI Defined Terms

Processing (and its cognates, Process and Processed): Collecting, retaining, storing, disclosing, transferring, transmitting, amending, deleting or otherwise making use of *Personal Information*.

Third Party: Any natural *Person* or legal entity other than the natural *Person* to whom the relevant *Personal Information* relates, *Anti-Doping Organizations* and *Third-Party Agents*.