

REPORT OF THE
**INDEPENDENT
OBSERVERS**

XXI COMMONWEALTH GAMES
GOLD COAST 2018



Table of Contents

1. Executive Summary.....	3
2. Introduction	4
3. Objectives	4
4. Acknowledgements	4
5. Scope.....	4
6. IO Team Composition.....	5
7. Key Partnerships	5
8. Commonwealth Games Ant-Doping Task Force.....	6
9. Risk Assessment.....	8
10. Test Distribution Plan	9
11. National Anti-Doping Organization.....	11
12. Whereabouts.....	12
13. Therapeutic Use Exemptions (TUEs)	13
14. Gathering and Sharing of Information and Intelligence	14
15. Doping Control Policies, Procedures and Daily Reporting	15
16. Results Management.....	16
17. Education	16

1. Executive Summary

The Commonwealth Games Federation (CGF) repeatedly described the 21st edition of the Commonwealth Games (the Games) as a 'Games of firsts.' From an anti-doping perspective, this rang true. With its partners – the Australian Sports Anti-Doping Authority (ASADA) and the Gold Coast Organizing Committee (GOLDOC) – the CGF was able to deploy an intelligence-led doping control program that sought to make an impact on the detection and deterrence of doping prior to the event, over the course of competition itself, and even post-event.

To realize this ambition, the CGF authorized and participated in a pre-Games taskforce which coordinated efforts between the relevant International Federations (IFs) of some of the highest risk sports for doping for the Commonwealth Games, as well as National Anti-Doping Organizations (NADOs) and Regional Anti-Doping Organisations (RADOs) to ensure broad representation from a number of Commonwealth countries. The objective of this taskforce effort was to enhance the probability that participating athletes would be tested out of competition prior to their arrival in Australia. These efforts were a significant undertaking, which was led by, and resourced by ASADA. Acknowledging that the risk for doping is predominantly in the lead up period prior to major competition rather than at the event itself, this initiative was a worthy effort to maximize the chances of a level playing field in the Gold Coast. A taskforce initiative (of this magnitude) was a first for the CGF and will hopefully become a permanent fixture of future editions of the Games.

Over the course of competition, the CGF wisely availed itself of the expertise, resources, and existing processes of ASADA. In so doing, the CGF was able to leverage the day-to-day operations of a NADO in a major event setting. Rather than the traditional 'top-down' approach to test planning and delivery, the ASADA involvement saw Testing, Education, Intelligence gathering and even Science integrated into daily activities whereby CGF/ASADA/GOLDOC plans were adjusted to react to new information collected by Doping Control personnel, ASADA investigators, intelligence analysts, and scientific officers, all of whom were on-site. This capacity, blended with the experience and leadership of the CGF Medical Commission, resulted in a truly integrated anti-doping effort; another first for the Commonwealth Games.

Finally, to address the future, the CGF took up a key recommendation from the Independent Observer (IO) program of the preceding Games in Glasgow. With the support of ASADA, the CGF embedded in both its rules and operations, a plan to store all samples collected at the Games for possible further testing. Such a retention and reanalysis policy, when monitored and acted upon appropriately, has the potential to be both a powerful deterrent to those who may choose to engage in doping behavior, and ensure those that do may still be found to have violated the rules long after the event has ended. It will be imperative that the CGF ensures that the opportunity this program affords is maximized by coordinating with IFs and NADOs to recommend and undertake further analysis based on new intelligence and analytical methods in the years ahead. All of these 'firsts' for the CGF are commendable achievements that demonstrated a shared commitment by CGF, Australian authorities and all relevant stakeholders to do as much as possible to host a competition that protected the rights of athletes to clean competition.

As with all major events, there remain opportunities to improve, and other major sporting events would do well to learn from the aforementioned strengths of the Commonwealth Games anti-doping program. For the CGF itself, the IO encourages that it continue to strengthen for future editions by continuing strong partnerships with host country NADOs, increasing the proportion of out of competition tests, and ensuring all policies and programs such as those related to the provision of whereabouts information, are developed in such a way that they are both enforceable and proportionate.

2. Introduction

The Gold Coast Commonwealth Games saw more than 6000 athletes compete across 23 sports representing 71 Commonwealth Nations and Territories. Held April 4-15, 2018 in the cities of Gold Coast, Brisbane, Cairns and Townsville, Australia, the integrated able-bodied and para-sport event awarded medals across 275 events. As the responsible event organizer and Signatory to the World Anti-Doping Code (Code), the CGF kindly invited the World Anti-Doping Agency's (WADA) IO program to have a presence at the Games where it observed and reported on limited aspects of the CGF Anti-Doping program.

3. Objectives

First introduced by WADA in 2000, the IO program provides Major Event Organizations (MEOs) like the CGF, third-party oversight of anti-doping efforts and seeks to instill greater athlete confidence in the integrity and quality of the doping control program in effect. In line with more recent efforts by WADA to ensure that the IO program's presence is constructive as well as observational, the primary objective of the IO program in Gold Coast was to support the CGF in implementing an effective anti-doping program in compliance with both the Code and its applicable International Standards. To that end, the IO team met with the CGF and related partners on a daily basis to provide feedback and constructive suggestions in an effort to add value to the Commonwealth Games' anti-doping program as a whole.

4. Acknowledgements

The Commonwealth Games have long been referred to as the 'Friendly Games'. This edition proved no exception. The WADA IO Team gratefully acknowledges the transparency, hospitality and expertise of the three main partners responsible for the delivery of planning and doping control activities in Gold Coast. The sincere desire to serve the interests of clean athletes was evident amongst the CGF Medical Committee, ASADA, and GOLDOC. The friendly and constructive rapport between these partners and the IO team clearly facilitated a positive working relationship between all concerned. The IO team would like to highlight in particular both Dr. M. Jegathesan, Honorary Medical Adviser and Chairman of the CGF Medical Commission and David Sharpe, CEO of ASADA, both of whom led their teams in an assertive and cordial fashion.

The IO team also wishes to thank the committed volunteers supporting all elements of anti-doping activity without whom the program could not operate, and to convey it's thanks to all athletes who demonstrated their commitment to clean sport via their cooperation with doping control initiatives.

5. Scope

The three-member IO team was present from April 1 to April 10, which allowed the team to observe a number of program areas such as out-of-competition testing in the athletes' village prior to competition starting. As with any major event, it is impossible for the IO program to observe every aspect of the doping control program, and therefore the team chose to use its expertise to examine all planning aspects of the program prior to the Games beginning, and the subsequent implementation of these plans at a high level. The IO team was well briefed on the elements of CGF planning in the months prior to the Games, which included communication with WADA who provided guidance on a number of pre-event matters including the anti-doping rules for the Games as well as the formation and operation of a Games 'taskforce.' Both in the lead up to and during the Games, the CGF was entirely forthcoming with respect to the transparency of their anti-doping program.

The primary scope therefore of the IO team was examining the agreed upon doping control plans made between the CGF, ASADA and GOLDOC, and subsequently evaluating and ensuring that these plans

were put into practice in line with the CGF Anti-Doping Standard (ADS) published and in force for the Games. The scope of IO mission observations did not include contracted Laboratory operations given these were not on-site (The WADA accredited laboratory in Sydney). No anti-doping hearings were held during the period of IO observation, so this too was outside the scope of observation although all cases were monitored via access to the Anti-Doping Administration and Management System (ADAMS) and WADA's Legal Department who are responsible for regularly monitoring such information.

The IO team also considered prior recommendations made by previous IO teams and evaluated whether these had been appropriately addressed by the CGF in the lead up to and during the Games. Specific mentions are made in this report therefore to recommendations made to the CGF by the Glasgow Games IO team following the 2014 Games that were acted upon for this edition of the Commonwealth Games.

6. IO Team Composition

The IO team had the requisite skills and experience to observe and comment upon activities within the scope of observation and as part of capacity building in the region, the two independent members of the team were from anti-doping organizations located in the Oceania region.

The IO team was composed of the following members:

Stuart KEMP (Chair)
Deputy Director, Standards & Harmonization, World Anti-Doping Agency, Canada

Jude ELLIS
Programme Director - Testing and Investigations, Drug-Free Sport New Zealand,
New Zealand

Natanya POTOI
Executive Officer, Oceania Regional Anti-Doping Organization, Samoa

7. Key Partnerships

Essential to the planning and delivery of the CGF's anti-doping program were the CGF Medical Commission, ASADA and GOLDOC. Responsible for the overall direction of the plan, the CGF representatives comprised experienced and committed physicians representing a diverse group of Commonwealth member countries. The regionally diverse membership added value to the team's communication with member associations regarding the anti-doping program and any questions or concerns that arose. The CGF entered into a tripartite agreement with ASADA for the provision of testing and intelligence activities, and GOLDOC who were responsible for the overall logistics of sample collection and staffing. This agreement was signed in May 2017.

Within days of working together, the eight members of the CGF Medical Commission and staff of both ASADA and GOLDOC had developed a good working relationship, and trust between all parties was high. This cooperation was most welcome given that in the lead up to the Games, there was some disagreement and modest tension between parties concerning policies, testing plans, and roles and responsibilities more generally. That said, all parties had committed to working together through the 'High Integrity Anti-Doping Partnership' which sought to implement robust anti-doping measures both prior to, and during the Games.

While in the end all parties worked cooperatively, given the fluidity of decision-making, ideally all roles and responsibilities would have been clearly articulated and documented well in advance so that the appropriate 'chain of command' for decision-making was well understood. By way of example, ASADA was very thorough and professional with regards to the collection of information, including interviewing staff, athletes and athlete personnel when suspicious doping paraphernalia was found within Games-

related confines, however as the accountable Testing Authority and Major Event 'owner,' it was important the CGF not risk abdicating their responsibilities to ASADA entirely. The level of trust between these organizations ensured no such abdication occurred, however a better-documented delineation of roles and responsibilities, clearly understood and accepted by all, would have better protected all parties concerned provided these responsibilities were also followed in practice.

The composition of the anti-doping workforce was a unique hybrid of ASADA staff and Doping Control Officers (DCOs) which also included a modest number of international DCOs, and GOLDOC staff and volunteers. Predominantly managing the logistical aspects of staffing, scheduling, transport and venue administration, the GOLDOC team were the operational nucleus of the doping control program, whilst ASADA acted as the conduit through which all intelligence and test planning emanated.

The working relationship between GOLDOC and ASADA appeared to be very constructive and the two teams were well integrated and acted cooperatively in the best interests of the doping control program as a whole. The only challenge for both ASADA and GOLDOC in planning both staffing, venue logistics and general operations, appeared to be the relatively late stage at which the Test Distribution Plan (TDP) was approved by the CGF. The distribution of tests, between competition and 'out of competition' in particular, changed significantly in the final weeks prior to the Games, which affected ASADA and GOLDOC's ability to optimize the dozens of staff and volunteers required to deliver on these plans. While a TDP will always need to be nimble and reactive to new inputs and intelligence, ideally the general principles should be agreed upon between the CGF and its partners at least 12 months in advance so that all relevant contracts and arrangements can be established in a predictable fashion.

Commendations and Recommendations

- 1. Given the limited resources available within the CGF dedicated to anti-doping between each edition of the Games, all future Organizing Committees are encouraged to engage in dialogue with both WADA and their local NADO as early as possible to ensure continuity between events and ensure that findings of previous IO reports are addressed.*
- 2. Furthermore, like many other MEOs, the CGF have excellent scientific and medical expertise at their disposal (the CGF Medical and Anti-Doping Committee). The IO suggests that this expertise be leveraged between Games so that many aspects of the doping control program are 'signed off' in advance of the Games so that staffing and other related Organizing Committee-related operations can plan appropriately. This approach would also ensure any roles and responsibilities of the NADO, as well as the TDP itself are well established prior to the arrival of the Committee members so that laboratory and sample collection personnel staffing can be finalized.*

8. Commonwealth Games Ant-Doping Task Force

Both the CGF and ASADA recognized that a Games-time anti-doping program has limitations with respect to its ability to detect doping considering that competitors may have engaged in doping behaviour well in advance of an event. To address this limitation, prior to testing jurisdiction taking effect, the CGF and ASADA collaborated to advance an anti-doping 'taskforce.' The objectives of this initiative were to promote and protect the 'legitimacy and credibility' of the Games and promote a level playing field by coordinating anti-doping efforts in the lead up to the Games – a high risk period for potential doping. Such an initiative sent a strong message to prospective athletes that the CGF and ASADA were committed to protecting the integrity of the Games by maximizing the chances of detecting and deterring doping amongst prospective Games participants.

In practice, ASADA led the taskforce as the Secretariat, and also included GOLDOC. This ensured continuity between the plans and outcomes of the taskforce, and the activities of the Games-time testing program. To add further independence and expertise to the taskforce, the following IFs, NADOs and Regional Anti-Doping Organizations (RADOs) also participated in the taskforce:

- Cycling Ant-Doping Federation (CADF)¹
- Fédération internationale de natation (FINA)
- Athletics Integrity Unit (AIU)²
- International Weightlifting Federation (IWF)
- World Rugby (WR)
- Anti-Doping Singapore (ADS)
- Canadian Centre for Ethics in Sport (CCES)
- Drug-Free Sport New Zealand (DFSNZ)
- South African Institute for Drug-Free Sport (SAIDS)
- United Kingdom Anti-Doping (UKAD)
- Caribbean Regional Anti-Doping Organization

This diverse group of higher-risk sports and regionally representative NADOs and RADOs shared information and intelligence in order to coordinate testing recommendations to both IFs and Commonwealth NADOs for their consideration in order to optimize pre-Games testing efforts. Furthermore, the taskforce's coordination and information gathering fed into the dynamic Test Distribution Plan of the CGF and ASADA.

Specifically, the taskforce was able to identify athletes that warranted testing by their NADO or IF based on either specific intelligence (such as an Atypical Passports or tip-offs) and upon the start of the Commonwealth Games, the taskforce was able to provide a full account of those athletes participating in the Games that should be included in the Games-time out of competition testing program given either an absence or paucity of testing prior to their arrival in Australia. The taskforce made more than 1100 testing recommendations to 46 individual Anti-Doping Organizations (ADOs). Of these recommendations, 62% of the athletes were subsequently participants in Gold Coast. The taskforce recommendations made between 1 July 2017 and 24 March 2018 resulted in 633 tests being undertaken on these participating athletes by either the IF or NADO with testing jurisdiction over the athletes.

Although difficult to directly attribute to the taskforce itself, a notable 69% of all participating athletes were tested at least once between 1 July 2017 and the start of the Commonwealth Games. 34% of the athletes were tested three or more times during this period and by the end of the Games, 79% of participating athletes had been subject to testing either prior to the Games (from 1 July) or within the competition itself. Considering that a number of Commonwealth Games sports can be considered low risk for doping and would not therefore be expected to receive a significant number of tests, these figures represent a significant achievement indicative of well-informed, and coordinated testing.

It should be noted (and ASADA should be commended for it) that in addition to making testing recommendations, the Australian Government funded 507 tests as a part of the taskforce to support testing recommendations which might otherwise not have been completed due to budget constraints within the respective ADO. The Commonwealth Games anti-doping taskforce wisely coordinated with those responsible for similar pre-event taskforces that worked in advance of the Rio de Janeiro and Pyeongchang Olympic Games in order to benefit from their learnings. It was clear that the Commonwealth Games taskforce set out realistic objectives by focusing its available resources on those sports and nations deemed to be at the highest potential risk for doping based on an objective and well-informed risk assessment.

As the Games began and the CGF's testing jurisdiction commenced, the taskforce provided all relevant outcomes to the CGF including a list of 127 in competition and 240 out of competition testing recommendations for the Games. The CGF accepted these recommendations in full.

¹ The CADF administers the anti-doping program independently of the International Cycling Union (UCI).

² The AIU administers the anti-doping program independently of the International Association of Athletics Federations (IAAF).

Commendations and Recommendations

1. *The taskforce concept was well advanced by the CGF and its partners. The forthright way in which many NADOs and IFs shared their test plans and outcomes to the benefit of the CGF testing program was a great success. Future taskforce initiatives would be well advised to begin their work as far as 12 months prior to the Games in order to maximize success.*
2. *WADA may also wish to consider enhanced ways and means to have ADAMS share the necessary data from various anti-doping programs without requiring laborious sharing of data by email and spreadsheets. Provided the necessary collaboration and confidentiality agreements are in place, this would be a more efficient and secure means to coordinate activity.*
3. *ASADA, the CGF and the taskforce members are congratulated for the significant effort this project represents and are encouraged to share this model with other MEOs and host-country NADOs.*

9. Risk Assessment

The risk assessment led by ASADA and informed by the taskforce members sought to maximize detection of doping and 'meet or exceed World Anti-Doping Code compliance requirements.' The assessment process resembled the existing Australian domestic practice, which included collection and analysis of data relating to:

- i. Physiological factors relevant to Commonwealth sports

This entailed a grading scheme for all Commonwealth Games sports relative to 'Power/Strength,' Vo2/Endurance, and Muscle Endurance elements.

- ii. Historical doping patterns

A review was conducted of all Adverse Analytical Findings (AAFs) from the prior three editions of the Commonwealth Games.

- iii. Available intelligence

Although little intelligence was available to ASADA regarding international athletes as this would not have been the primary focus of their attention (or reach) prior to the Games, it is important to note that the intelligence function of ASADA was of significant importance during the Games themselves.

- iv. Benefits of doping relative to physiological factors

The risk assessment sought to quantify to what extent all Commonwealth Games sports and their disciplines could potentially be affected by doping in terms of performance benefit. Disciplines were graded by the possible impact relative to other requisite factors (ex. power vs. skill).

- v. Non-physiological incentives to engage in doping behaviour

Available data was also reviewed to determine what financial incentives might be available to athletes who achieved particular performances within a given sport discipline.

A subsequent weighting of the aforementioned sport attributes and their elements was devised, based upon the significance and availability of the assessed data. This weighting produced a 'risk score' for each discipline.

Commendations and Recommendations

1. ASADA and the CGF are commended for conducting a proper risk assessment in order to objectively evaluate where possible doping risks might be present amongst the population of participating Commonwealth Games athletes. The categories of risk were thorough and generally in line with the requirements of the International Standard for Testing and Investigations (ISTI). One element that could have been included however was the real or perceived strength of the applicable doping control program of participating countries. Data could be reviewed from the annual Testing Figures and Anti-Doping Rule Violation Reports published by WADA to ascertain the volume of testing in Commonwealth sports by each country's NADO or RADO.

10. Test Distribution Plan

Generally speaking, the risk assessment informed the Test Distribution Plan by proposing testing in such a way as to be commensurate with those risks identified. Once this proportionate approach was applied, the overall number of tests that had already been agreed upon (based upon budgetary considerations) were moderated by two factors. These included ensuring a sufficient number of medallists were tested in some events to 'ensure the integrity of medals,' and consideration of team sports where the ratio of athletes to available tests was too high. The budgetary commitment from GOLDOC represented the equivalent of 800 tests. As a matter of policy, the CGF directed that approximately half of these be allocated to medalists. This afforded significant flexibility in the remainder of the tests to ensure that testing was allocated on a targeted, risk-based basis.

Despite the well-considered risk assessment and the weighted approach to test distribution in order to ensure testing plans reflected these risks, there was one element of the TDP that was not entirely proportionate. The CGF was clear that the 'integrity of medals' was an underlying principle of their approach to anti-doping. This approach is not uncommon across other major events and there is also, arguably, a level of public expectation in this regard. The IO team however felt that this approach was in some ways a missed opportunity. The risks identified by the assessment will have also identified that the peak risk period for particular types of doping will have been prior to the competition itself.

The CGF had testing jurisdiction over athletes scheduled to participate in the Games from 7 March which was when entries for the Games closed. For the first time, the CGF did not define the entire period of the Games as *in competition*, but rather had testing jurisdiction both in an out of competition on all participating athletes during the Games period. In practice this meant athletes could be tested prior to their arrival in Australia, at staging camps in the country, or even after competition. Consequently, more out of competition testing could have been conducted during those periods where the most sophisticated types of doping were more likely to have occurred. The IO team and the CGF had constructive discussions about this topic, as there are a number of nuances that complicate this issue. In particular, the CGF's insistence on the 'integrity of medals' is worth further deliberation and this report makes recommendations in this regard below.

By close of Games, 1007 samples were collected from athletes participating in the Gold Coast Commonwealth Games according to records available in the Anti-Doping Administration and Management System (ADAMS). Of these, 113 were blood samples, 906 included urine, and six Athlete Biological Passport (ABP)³ samples were collected. A detailed summary of the testing program is found in the table below.

³ ABP (blood) tests were only directed upon the request of an IF or NADO Athlete Passport Management Unit.

Sport	Urine IC	Urine OOC	Urine Total	Blood IC	Blood OOC	Blood Total	ABP Total	Total Samples
Aquatics	113	39	152	3	6	9	5	166
Athletics	141	68	209	10	25	35	0	246
Badminton	9	0	9	0	0	0	0	9
Basketball	10	2	12	0	2	2	0	12
Boules Sport	7	0	7	0	0	0	0	7
Boxing	28	18	46	2	13	15	0	46
Cycling	105	60	165	4	8	12	0	177
Field Hockey	12	3	15	0	2	2	0	17
Gymnastics	19	0	19	1	0	1	0	20
Netball	11	2	13	0	0	0	0	13
Para Athletics	19	11	30	0	3	0	0	33
Para Powerlifting	4	5	9	0	0	0	0	9
Para Swimming	14	2	16	0	0	0	0	16
Rugby 7s	17	11	28	1	3	4	1	33
Shooting	25	0	25	0	0	0	0	25
Squash	6	1	7	0	0	0	0	7
Table Tennis	10	0	10	0	0	0	0	10
Triathlon	24	14	38	0	3	3	0	41
Volleyball	10	0	10	0	0	0	0	10
Weightlifting	26	22	48	8	11	19	0	67
Wrestling	28	10	38	1	4	5	0	43
Total	638	268	906	30	80	107	6	1007

With the support of ASADA and the Australian government, the CGF was able to demonstrate its commitment to effective detection and deterrence through the adoption of a robust sample retention policy. The 2015 World Anti-Doping Code affords ADOs the right to store samples for up to ten years in order to avail themselves of new detection methodologies and/or new intelligence that may warrant the further testing of a previously collected sample. All samples collected under the authority of the CGF are being stored by ASADA and are available to all relevant ADOs for future further analysis upon request to the CGF. The adoption of a sample retention and reanalysis program was a key recommendation of the 2014 Commonwealth Games IO Report and it is pleasing that this program is now in place following the 2018 edition of the Games.

Given the amount of work that went into intelligence-led athlete selections and that all samples would be stored for potential further analysis, increased out of competition testing would have been preferable. While a challenging narrative to articulate, increased out of competition testing and the ability to conduct further analysis on a stored out of competition sample may well do more to protect the 'integrity of medals' than testing medallists themselves following competition, especially in those sports like Athletics and Aquatics where the same athletes may be tested multiple times over the course of the event. All MEOs should consider the balance between medallist testing and testing at peak risk periods carefully. Obviously, in those sports where the doping risk may be highest in competition (with stimulants and diuretics for example), these tests remain crucial, however where the risk lies in the weeks and months leading up to an event, medal integrity is best protected through robust out of competition testing.

It is worth noting too that the CGF and other MEOs may find that in storing samples for further analysis, the possibility that a medallist may test 'positive' in the future potentially exerts extra pressure to test as many athletes as possible who placed behind that medallist in the event medals are re-allocated. This underscores the need to redefine the 'integrity of medals' not by a single test conducted on the day, but rather by the entire testing profile of the athlete. By assessing athlete test history as was done by the taskforce in cooperation with other ADOs and WADA, this can be accomplished.

In many ways, the lower percentage of tests conducted out of competition was offset by the efforts made by the taskforce to see that athletes arriving in Australia had been subject to robust testing programs prior to their arrival. The taskforce model is one all MEOs are encouraged to emulate and the objectives of such initiatives should be complementary to those of the Games-time TDP. In other words, there should be continuity between pre-Games testing activity and coordination, and the testing program that is subsequently implemented during the Games. Having the taskforce continue to collect information and make recommendations to the CGF during the Games period certainly achieved this and other MEOs would be wise to consider this model.

Commendations and Recommendations

- 1. The Test Distribution Plan (and its subsequent outcomes) was well devised and fully adhered to the WADA Technical Document for Sports Specific Analysis (TDSSA), thereby ensuring an appropriate allocation of tests for Erythropoiesis Stimulating Agents (ESAs), Growth Hormone testing (GH) and Growth Hormone Releasing Factors (GHRFs). Furthermore, these allocations were made intelligently by applying these particular tests to athletes on a targeted basis, not only to the relevant sports and disciplines.*
- 2. One aspect of the TDP however, that could be enhanced in future editions of the Games, is to ensure a higher proportion of out of competition testing. The risk assessment suggested that at least 50% of testing should be conducted out of competition. Final testing figures indicate that upwards of 70% of testing was conducted in competition (impacted too by policies to have 'record testing' ratified by doping controls). Increased out of competition testing would enable greater focus on those performance enhancing substances and methods that are of greatest risk during non-competition periods rather than on substances that are less so. Financial savings may also be available to re-allocate further out of competition testing given that an in-competition analytical test is more expensive as it includes analysis for a longer list of substances.*

11. National Anti-Doping Organization

The capacity and expertise of Australia's NADO, the Australian Sports Anti-Doping Authority (ASADA), was fully leveraged by the CGF and GOLDOC to maximize the efficacy and strength of the Commonwealth Games doping control program. The intelligence-led approach to testing could not have happened without capitalizing on the structures and processes already in place within ASADA. ASADA used these existing processes to essentially provide the CGF with a fully functional ADO with all functional elements at its disposal. In practice, ASADA had legal, medical (ABP), intelligence (analysts and investigators), and testing staff on-site in the Gold Coast throughout the Games in order to collect and disseminate all relevant information to the benefit of the CGF program. The primary functions of ASADA on behalf of the CGF were to:

- i. Collect samples in accordance with the TDP;
- ii. Collect, monitor, assess and manage all intelligence relating to the Games; and
- iii. Investigate any possible analytical or non-analytical matters through investigations.

An Operations Centre was established by ASADA in the Gold Coast, which was most impressive in its proficiency. The CGF quickly identified the value of this resource and increasingly relied on ASADA for advice on atypical passport management, target testing, athlete and athlete support personnel interviews (investigations), and cooperation more generally. The resources from ASADA that were at the disposal of the CGF were not without significant expense to ASADA (some 38 staff were deployed in a staggered schedule throughout the Games). The NADO made a commitment to avail the CGF of these resources without direct cost, and undertook these activities as a part of ASADA's general commitment to international events hosted in Australia, regardless of their lack of direct authority over anti-doping matters within the confines of the CGF event.

Commendations and Recommendations

1. *It may not be realistic for all NADOs to provide such services to MEOs organizing events in their particular country, however for those MEOs cooperating with host NADOs, the ASADA model would be an excellent one to emulate. The CGF and ASADA may wish to consider making their cooperation model available to other ADOs to use at future events and share in detail how the various functional areas of a NADO can add value to the operations of a Major Event.*
2. *As mentioned earlier in this report, ASADA provided significant support to the CGF in part by committing to store samples collected during the Commonwealth Games. The policy will not be for ASADA or the CGF to direct further analysis on these samples themselves within the next ten years; rather any ADO who wishes to analyze a sample relevant to their sport (IF) or country (NADO) may make a request to transfer ownership of that sample. In order for this sample retention and 'reanalysis' program to be effective therefore, the CGF and ASADA must communicate with all Commonwealth NADOs and sports advising them of the availability of these samples, and what protocol they should follow in order to take advantage of this opportunity.*

The CGF should also ensure that such an advisory is repeated no less than one year prior to the next edition of the Games so that ADOs with any new information or intelligence are reminded of the availability of these samples especially for athletes who may participating in the next Commonwealth Games. In the event limited or no requests are made for sample transfer, the CGF should also build a contingency into its future TDPs to initiate sample reanalysis under its own authority with priority given to those athletes who are repeat competitors and at highest risk for doping as evaluated by the CGF and its partners.

12. Whereabouts

The collection and management of athlete whereabouts information is a constant challenge for all MEOs. The Gold Coast 2018 Commonwealth Games were no exception. That said, the challenges expected from a two-tier system and a largely spreadsheet-based approach were nullified by the professional and common-sense approaches taken by ASADA and GOLDOC doping control personnel.

The Commonwealth Games Rules (ADS) required all participating athletes to provide whereabouts information. For those athletes already in the Registered Testing Pool (RTP) of their NADO or IF, no new burden was imposed on the athlete, as their information was made available to the CGF and its partners via ADAMS. For others however, whereabouts information was required for the duration of the Games with the responsibility shared by the athlete and their member federation (CGA).

Foremost, the CGF approach to whereabouts information was disproportionate. With less than 250 samples collected out of competition, it cannot be considered commensurate to require whereabouts information from more than 6000 athletes. Furthermore, as the ADS (which included the whereabouts regulations) was only published a matter of weeks before the Games, compliance with this requirement by CGAs and athletes alike was inconsistent at best. Some CGAs appeared to lack the IT proficiency to complete the template forms, while others seemed completely unaware of or completely disregarded the requirement. That being said, the CGF did make efforts to educate and inform the CGAs via in-person meetings, webinars, and individual follow-up.

The incentive to provide missing information was also lacking without proper enforcement of the provisions concerning whereabouts submission in the CGF ADS. Although clear consequences were outlined in the ADS for those athletes failing to provide whereabouts outside of pre-existing RTPs, given the disproportionate relationship between the number of athletes obliged to provide whereabouts and the number of out of competition tests that required this information, it was not a good use of resources for the CGF to follow up with CGAs for missing information that may not be used. Whilst administratively this was a pragmatic decision, ideally the policies in the Standard would have been enforceable in order to be meaningful.

It should be noted that despite the aforementioned weaknesses, athlete and CGA concerns were minimal. At many major events witnessed by IO team members, athlete and support personnel have voiced frustration when Doping Control personnel have roamed the athlete village or training venues asking after certain athletes or requesting whereabouts information when teams had gone out of their way to submit information in advance. ASADA's efforts to collect both 'open source' and cross-functional information with the support of the CGF Medical Commission contributed towards the success ASADA and GOLDOC had in locating athletes when no whereabouts information was available.

For example, ASADA's relationship with Australian Border Services provided insight as to when an athlete had entered the country, relationships with the various Institutes of Sport provided training times and locations, and ASADA analysts provided athlete location information found via open source information such as online news, social media and/or from other taskforce members. This approach and lack of exclusive reliance on athlete whereabouts submissions contributed to more effective out of competition testing

Commendations and Recommendations

- 1. In the future, the IO would recommend that a whereabouts program be tailored to the needs of the TDP for the Games. The whereabouts regime for the Gold Coast embedded in the ADS seems to have been drafted without regard for how the TDP would operate in practice. Given both the burden on, and potential consequences for athletes, whereabouts requirements should not be used primarily as a deterrent to doping, but rather as a means to support effective out of competition testing.*
- 2. A more proportionate system in the future must be supported by adequate CGA education, provision of information and resources, as well as a dedicated means to follow up on missing information so that compliance with the rule is incentivised by proper enforcement.*
- 3. Where possible, this support should be aided by technology. The extent to which accreditation scanning can be linked to a central system which anti-doping authorities could have access to monitor the entry and exit of athletes from accredited venues should be explored.*
- 4. Furthermore, as WADA plans to introduce a new athlete whereabouts application by early 2019, WADA should work with the CGF and other MEOs to explore how this could be modified to suit a Games-time program without adding any burden to athletes that regularly provide their whereabouts to their IF and/or NADO.*

13. Therapeutic Use Exemptions (TUEs)

TUE management was the responsibility of the CGF Medical Commission and member Dr. Andrew Pipe in particular. The CGF process for the review of TUEs and applying mutual recognition principles was effective. Processing new TUE applications was conducted efficiently and pragmatically. Although not all submissions were made within 30 days in advance as required, the CGF TUE Committee (TUEC) processed applications promptly and information was made available in ADAMS as required. Twenty-nine pre-existing TUEs available in ADAMS were recognized by the CGF, and nine new TUE applications were received by the CGF TUEC and subsequently approved and made available in ADAMS. Of interest, and potentially indicative of education and/or the robustness of existing anti-doping programs, (or the nature of medical practice in certain countries), 28 of the 29 existing TUEs were for athletes from just five countries.

Commendations and Recommendations

1. *The CGF TUE program was well managed and the experienced physicians of the Medical and TUE Committees ensured excellent awareness and administration amongst member Commonwealth Games Associations (CGAs).*

14. Gathering and Sharing of Information and Intelligence

In addition to the information collected by the taskforce in the lead up to the Games, ASADA's investigative and data analysis capacity was put to use as a part of the High Integrity initiative. ASADA shared all relevant information with the CGF on a daily basis and a log of all such information was maintained, with the nature and source of the intelligence captured as well as all follow-up actions taken.

The robustness of ASADA's intelligence and investigations processes included formal and dynamic relationships with relevant law enforcement agencies. ASADA prepared a brief for law enforcement partners, which clearly articulated the role of ASADA at the Games, what information from law enforcement might be of mutual interest, and identified the related anti-doping regulations in force.

In some instances, intelligence gathered from a number of sources warranted further review and/or investigation. For example, on more than one occasion, possible doping paraphernalia such as needles and vials were found at accredited Games locations. In these cases, ASADA were able to dispatch one or more of their investigative team to collect evidence and/or interview those present at the location without delay. Each such investigation led to a documented report with photographic evidence that evaluated the source and reliability of information. The comprehensive manner in which details were documented allowed the CGF to raise the matter with the relevant CGA to pursue any possible contravention of anti-doping regulations on each occasion.

Subsequent to all reviews of these reports, follow up laboratory analysis, and witness interviews, no anti-doping rule violations were confirmed, however there were three hearings before the CGF 'Federation Court' concerning violation of the CGF's 'no-needle' policy.⁴ On these occasions, the CGF Federation Court established as an independent tribunal for the review of such matters, who met promptly and issued their decision in accordance with the CGF Anti-Doping Standard.

Commendations and Recommendations

1. *ASADA's experience in the realm of intelligence gathering and investigations within its anti-doping was a significant contribution to the success of the CGF's anti-doping program. The consistent application of a robust but fair approach to maximizing detection and deterrence through attention to detail set a new standard for multi-sport Games.*
2. *It would be advisable for the CGF to continue engaging future host country NADOs or RADOs as applicable for more than only sample collection services. Provided the host NADO/RADO has the requisite capacity and capability, the integrated intelligence-led testing capacity demonstrated by the host NADO is a model that future Commonwealth Games host countries would be wise to build upon, leveraging the major event in their country to develop relationships with law enforcement and investigative capacity more generally.*

All such initiatives and policies however should be fully in line with the ISTI, and have a primary objective of protecting athlete rights. It should be noted that ASADA, as a government agency, had authority beyond those of the average NADO whose authority generally relates to testing-related jurisdiction. ASADA, via domestic legislation and endorsed by the applicable CGF ADS,

⁴ The CGF's 'no-needle' policy is not considered an anti-doping regulation but rather as a guideline for informed medical practice.

had authority within their remit to conduct search and seizures for example. ASADA exercised this right with caution and developed the requisite relationship with the CGF to ensure there was an understanding that such a tool would only be used in exceptional circumstances.

- 3. ASADA's existing intelligence/information 'Hotline' was also in operation during the Games. However, more could have been done to extend the reach of this resource. ASADA and the CGF published useful information about the doping control process (made available to CGAs online and in doping control stations) and important facts about the testing program, but messaging about ways to provide intelligence and encouraging sharing of anonymous information to the international population of games participants appeared to be missing and could have been included in the resources outlined in the Education section of this report.*
- 4. Finally, the ASADA team on-site included scientific expertise. While some consultation was conducted between the CGF and these staff, it would have been preferable for the ASADA team to have direct access to TUE and Athlete Biological Passport data to inform real-time feedback and testing recommendations. Provided the proper data privacy and confidentiality agreements had been in place to do so, the only apparent limitation appears to have been the way in which ADAMS restricts access by service providers to this data. WADA should consider ways to make such access available in the future.*

15. Doping Control Policies, Procedures and Daily Reporting

ASADA produced (in consultation with the GC 2018 Operational Working Group, which included representatives from the CGF and GOLDOC) a 66 page DCO Operations Manual for the Gold Coast Commonwealth Games principally based on its own domestic policies and procedures. This was particularly useful for the six International DCOs invited from foreign NADOs and integrated into the workforce (in addition to the on-site briefings and training they were provided by ASADA). The manual included policies and procedures on topics ranging from health and safety, security, venue management and athlete selection protocols. All such policies were fully in line with the ISTI and ASADA should be commended on the attention to detail this manual provided all doping control personnel in order to carry out their duties in a uniform and appropriate fashion. The IO team observed a high level of compliance with the policies and procedures by all relevant personnel and any minor deviations were well documented and more importantly, rectified through corrective actions being delivered to all pertinent staff.

As a part of the daily meetings convened by the CGF Medical Commission to review medical and anti-doping issues attended by the IO team, ASADA staff provided detailed updates on both doping controls that had been conducted the previous day, and presented any new intelligence or recommendations that might warrant amendment to each day's testing plan. These reports included a summary of 'issues' that were brought to the CGF's attention in a most transparent way. Where mistakes were made, ASADA presented these with humility and with regard to how similar issues might be prevented in future. This on some occasions included memos sent to all doping control personnel as corrective actions. This transparency and attention to detail assisted in fostering a strong partnership between the CGF and ASADA/GOLDOC which was reflected by ASADA being afforded greater autonomy as the Games progressed.

In addition to the DCO Manual, an 84 page 'Operational Orders' resource was developed which comprehensively prescribed all logistical and staff-related activities. This too was a useful way to ensure uniform application of policies and procedures for ASADA staff, the 38 DCOs and 80 Chaperones operating across 25 competition and 13 training venues.

Commendations and Recommendations

- 1. There were some apparent impediments related to police screening requirements that prevented the ASADA doping control staff from integrating more international DCOs. Where feasible, all*

MEOs are encouraged to integrate an international element to DCO staffing to both benefit from linguistic and cultural diversity, but also to afford professional development opportunities, especially for the local region.

16. Results Management

A CGF Court was established by the CGF to hear all matters arising under the ADS. The IO team were aware of five adverse analytical findings reported by the contracted Sydney WADA-accredited laboratory during the Games. The IO team was not present for the full results management process, however all of these findings had valid and applicable TUEs on file. At the time of finalizing this report, formal notification by the CGF indicating these cases had been closed, had not been received.

17. Education

An athlete Outreach station was hosted by ASADA and present outside the Athlete village dining hall between 7 – 11 April; a high traffic area for athletes and their support personnel. ASADA staff were on hand to answer questions from Games participants and presented highly interactive ways of engaging athletes about salient anti-doping issues such as the use of supplements, and understanding the doping control procedure and the athlete's rights in particular. The use of virtual and augmented reality resources added value to the Outreach presence and appeared to elicit a positive reception from athletes. In addition to these efforts, anti-doping literature was made available to CGAs electronically in advance of the Games and printed material was available to athletes in doping control stations.

Commendations and Recommendations

- 1. ASADA was able to provide a positive and athlete-facing initiative that represented the objectives and values of anti-doping well. Without the host NADOs efforts, no such Outreach or dedicated education resource may have been on-site.*
- 2. Given the apparent disparity in anti-doping knowledge amongst athletes of the Commonwealth, and the varied capacity for participating countries to provide direct education to athletes prior to their arrival at the Games, the CGF should leverage the existing online education resources developed by WADA. These free resources are available in multiple languages and could be used to deliver a minimum standard of anti-doping education and information either through online training/certification, and/or at the time of arrival in the host country.*