THE INDEPENDENT PERSON REPORT

18 July 2016

Glossary

AAF	Adverse Analytical Finding
ABP	Athlete Biological Passport
ADAMS	Anti-Doping Administration & Management System
ARAF	All-Russian Athletics Federation
A samples and B samples	In doping control conducted under the World Anti-Doping Code, the urine collected from an athlete is divided into an A bottle and a B bottle. An initial screen is performed on the A bottle. If a suspicious result is found in that screen, then a confirmatory analysis is performed on the A sample. If the athlete requests, the B bottle is opened and a confirmatory analysis is performed on the urine in that bottle as well.
CAS	Court of Arbitration for Sport
Code	World Anti-Doping Code
CSP	Center of Sports Preparation of National Teams of Russia
DCC	Kings College Doping Control Centre
DCF	Doping Control Form
DCO	Doping Control Officer
EPO	Erythropoietin
FIFA	Fédération Internationale de Football Association
FSB	Russian Federal Security Service
IAAF	International Association of Athletics Federations
IC	Independent Commission
IP	Independent Person
IOC	International Olympic Committee
ISL	International Standard for Laboratories
KGB	Committee for State Security
LIMS	Laboratory Information Management System

London Games	London Games of the XXX Olympiad
MofS	Ministry of Sport
NOC	National Olympic Committee
PED	Performance Enhancing Drug
ROC	Russian Olympic Committee
RUSADA	Russian National Anti-Doping Agency
SG	Specific Gravity
Sochi Games	XXII Olympic Winter Games
TUE	Therapeutic Use Exemption
VNIIFK	Russian Federal Research Center of Physical Culture and Sport
WADA	World Anti-Doping Agency

Chapter 1: Executive Summary of this Report

Key Findings

1. The Moscow Laboratory operated, for the protection of doped Russian athletes, within a State-dictated failsafe system, described in the report as the Disappearing Positive Methodology.

2. The Sochi Laboratory operated a unique sample swapping methodology to enable doped Russian athletes to compete at the Games.

3. The Ministry of Sport directed, controlled and oversaw the manipulation of athlete's analytical results or sample swapping, with the active participation and assistance of the FSB, CSP, and both Moscow and Sochi Laboratories.

This Report will explain these key findings.

1.1 Introduction

This Chapter contains a summary of the principal outcomes of the work by the independent investigation conducted under the direction of and by the

Independent Person (IP) appointed by the World Anti-Doping Agency President. Background and detailed findings of the investigation are provided in subsequent chapters of this Report.

In the first part of May the American newsmagazine 60 Minutes and then *The New York Times* reported stories regarding state run doping during the Sochi 2014 Winter Olympic Games (the "Sochi Games"). The primary source of these allegations was the former Director of the Moscow and Sochi doping control laboratories, who ran the testing for thousands of Russian and international Olympians.

This Executive Summary describes the formation of the IP and sets out the Terms of Reference and a brief summary of the investigative methodology used. The balance of the summary sets out the IP's key investigative findings in respect of the allegations of doping misconduct.

1.2 Creation and Terms of Reference of the Independent Investigation into Sochi and Other Allegations

On 19 May 2016 the World Anti-Doping Agency (WADA) announced the appointment of an Independent Person (IP) to conduct an investigation of the allegations made by the former Director of the Moscow Laboratory, Dr. Grigory Rodchenkov ("Dr. Rodchenkov"). Professor Richard H. McLaren, law professor

at Western University, Canada; CEO of McLaren Global Sport Solutions Inc.; counsel to McKenzie Lake Lawyers, LLP and long standing CAS arbitrator, was appointed as the IP to investigate.

Professor Richard McLaren was previously a member of WADA's three-person Independent Commission (IC), led by founding WADA President Richard W. Pound QC, which exposed widespread doping in Russian Athletics. Working independently as the IP, Professor Richard McLaren was supported by a multi-disciplinary team. He has significant experience in the world of international sports law, including having conducted many international investigations related to doping and corruption.

"The Terms of Reference directed the IP to establish whether:

1. *There has been manipulation of the doping control process during the Sochi Games, including but not limited to, acts of tampering with the samples within the Sochi Laboratory.*
2. *Identify the modus operandi and those involved in such manipulation.*
3. *Identify any athlete that might have benefited from those alleged manipulations to conceal positive doping tests.*
4. *Identify if this Modus Operandi was also happening within Moscow Laboratory outside the period of the Sochi Games.*

5. *Determine other evidence or information held by Grigory Rodchenkov."*

Throughout the course of his mandate, the IP has personally reviewed all evidence gathered by his independent investigative team.

This Report was prepared from the collective work of the IP's investigative team. The investigative process is outlined and the many significant aspects that were studied and analyzed ultimately provide evidence for findings of fact.

The third paragraph of the IP's mandate, identifying athletes who benefited from the manipulations, has not been the primary focus of the IP's work. The IP investigative team has developed evidence identifying dozens of Russian athletes who appear to have been involved in doping. The compressed timeline of the IP investigation did not permit compilation of data to establish an anti-doping rule violation. The time limitation required the IP to deem this part of the mandate of lesser priority. The IP concentrated on the other four directives of the mandate.

The highly compressed timeline has meant that the IP investigative team has had to be selective in examining the large amount of data and information available to it. This Report reflects the work of the IP but it must be recognised that we have only skimmed the surface of the extensive data available. In doing so, the

IP has only made Findings in this Report that meet the standard of beyond a reasonable doubt.] WADA must decide if the IP investigative team should continue its work in respect of reviewing all of its material in relation to specific athletes and examining the remaining material it has.

1.3 Summary of the Evidence Gathering Process

The IP was appointed to lead this investigation to ensure an unbiased and independent examination of the evidence and from which all stakeholders could have confidence in the reporting of careful, thorough and balanced assessment of proven facts. The IP relied and built upon the work previously done by the Independent Commission (IC).

The IP conducted a number of witness interviews and reviewed thousands of documents, employed cyber analysis, conducted cyber and forensic analysis of hard drives, urine sample collection bottles and laboratory analysis of individual athlete samples.

The IP has gathered and reviewed as much evidence as could be accessed in the limited 57 day time frame in which this Report was required to be completed. More evidence is becoming available by the day but a cut-off had to be implemented in order to prepare the Report.

This Report contains evidence that the IP considers to be established beyond a reasonable doubt. There is more data that needs to be further analysed but does not affect the factual findings in this Report.

The mandate was not limited to just the published allegations. The IP examined other evidence of what was transpiring in the Moscow Laboratory before and after the period of the Sochi Games. The scope of the IP's work to establish the cover up of doping included looking into and reporting on any other information or evidence that materialized throughout the course of the investigation.

The investigation has established the Findings set out in this Report beyond a reasonable doubt. The IP can confirm the general veracity of the published information concerning the sample swapping that went on at the Sochi Laboratory during the Sochi Games. The surprise result of the Sochi investigation was the revelation of the extent of State oversight and directed control of the Moscow Laboratory in processing, and covering up urine samples of Russian athletes from virtually all sports before and after the Sochi Games.

The IC exposed State involvement in the manipulation of the doping control program operated by Russian Anti-Doping Agency ("RUSADA") and within Russian Athletics. The IC Report detailed the in the field regime for doping athletes and the corruption surrounding it. The outcomes of the IP add a deeper

understanding to this scheme and show proof of State directed oversight and corruption of the entirety of the Moscow laboratory's analytical work.

The State implemented a simple failsafe strategy. If all the operational precautions to promote and permit doping by Russian athletes proved to have been ineffective for whatever reason, the laboratory provided a failsafe mechanism. The State had the ability to transform a positive analytical result into a negative one by ordering that the analytical process of the Moscow Laboratory be altered. The Ministry of Sport ("MofS"), RUSADA and the Russian Federal Security Service (the "FSB") were all involved in this operation.

1.4 Witnesses

Dr. Rodchenkov's public statements triggered the creation of the IP investigation. He cooperated with the investigation, agreeing to multiple interviews and providing thousands of documents electronically or in hard copy. The IP has concluded that in the context of the investigation he has been truthful with the IP (see Chapter 2). Vitaly Stepanov, a former employee of RUSADA did not participate in the investigation but the IP did review the allegations he made.

There were other witnesses who came forward on a confidential basis. They were important to the work of the IP investigation in that they provided highly credible cross-corroboration of evidence both *viva voce* and documentary that the

IP had already secured. I have promised not to name these individuals, however I do want to thank them for their assistance, courage and fortitude in coming forward and sharing information and documents with the IP.

The IP did not seek to interview persons living within the Russian Federation. This includes government officials. My experience on the IC was such that individuals who were identified to give interviews were fearful of speaking to the IC. I did not seek to meet with government officials and did not think it necessary having already done so with the IC with little benefit to that investigation. I also received, unsolicited, an extensive narrative with attachments from one important government representative described in this Report. In the short time of 57 days that I was given to conduct this IP investigation it was simply not practical and I deemed such interviewing would not be helpful based on my experience with the IC.

1.5 Findings of IC and Relationship to IP Investigation

The IC uncovered a system within Russia for doping athletes directed by senior coaching officials of Russian athletics. That was accomplished by the corruption of Doping Control Officers ("DCO") working under the direction of RUSADA. The coaches were also able to achieve their objectives of doping athletes under their direction by knowing the wash out periods for various performance enhancing drugs ("PED"). They would be assisted in that regard by various informed medical personnel. The coaches were using the well-known and tried

system of doping with anabolic steroids without understanding that what they were accomplishing with the PEDs program. This was starting to show up in the Athlete Biological Passport ("ABP"), which was legally recognized in 2011 but not well understood in Russian sporting circles for at least another full year. As the problem became more acute, the corruption of both Russian and international Athletics officials was used as a method of slowing down and otherwise distorting the reporting of positive results by use of the ABP. All of what has just been described is documented in the two IC reports of November 2015 and January 2016.

What the IP investigation adds to the bigger picture is how the WADA accredited laboratory was controlled by the state and acted as the failsafe mechanism to cover up doping. If all other steps were unsuccessful in covering up or manipulating the doping control system then the laboratory's role was to make an initial finding of a positive result disappear. With the additional evidence available to the IP, this Report provides facts and proof beyond that of the IC and describes a larger picture of Russian doping activity and the sports involved beyond merely Athletics.

1.6 Overall Outcomes of the Independent Investigation

Upon embarking on its investigation the IP quickly found a wider means of concealing positive doping results than had been publically described for Sochi.

The Sochi Laboratory urine sample swapping scheme was a unique standalone approach to meet a special set of circumstances. Behind this lay a greater systematic scheme operated by the Moscow Laboratory for false reporting of positive samples supported by what the IP termed the disappearing positive methodology. What emerged from all the investigative sources was a simple but effective and efficient method for direction and control under the Deputy Minister of Sport to force the Laboratory to report any positive screen finding as a negative analytical result. The disappearing positive!

The Disappearing Positive Methodology was used as a State directed method following the very abysmal medal count by the Russian Olympic athletes participating in the 2010 Winter Olympic Games in Vancouver. At that time, Sochi had already been designated as the next Winter Olympic venue. A new Deputy Minister of Sport, Yuri Nagornykh, was appointed in 2010 by Executive Order of then Prime Minister, Vladimir Putin. Nagornykh, also a member of the Russian Olympic Committee ("ROC"), reports to the Minister of Sport, Vitaly Mutko. Minister Mutko has continuously held this appointment since the Presidential Order of President Medvedev in May 2008. He is also the chairman of the organising committee for the 2018 FIFA World Cup in Russia and is a member of the FIFA Executive Committee.

Deputy Minister Nagornykh was critical to the smooth running of the Disappearing Positive Methodology. Representing the State, he was advised of every positive analytical finding arising in the Moscow Laboratory from 2011 onwards. Nagornykh, as the Deputy Minister of Sport, decided who would benefit from a cover up and who would not be protected.

In total violation of the WADA International Standard for Laboratories ("ISL") all analytical positives appearing on the first sample screen at the Moscow laboratory were reported up to the Deputy Minister after the athlete's name had been added to the information to be supplied. The order would come back from the Deputy Minister "SAVE" or "QUARANTINE". If the order was a SAVE the laboratory personnel were required to report the sample negative in WADA's Anti-Doping Management System ("ADAMS"). Then the laboratory personnel would falsify the screen result in the Laboratory Information Management System ("LIMS") to show a negative laboratory result. The athlete benefited from the cover up determined and directed by the Deputy Minister of Sport and could continue to compete dirty.

The Disappearing Positive Methodology worked well to cover up doping except at international events where there were independent observers such as the IAAF World Championships held in Moscow in 2013 and the Winter Olympics and Paralympics in Sochi in 2014.

Through the efforts of the FSB, a method for surreptitiously removing the caps of tamper evident sample bottles containing the urine samples of doped Russian athletes had been developed for use at Sochi. The IP has developed forensic evidence that establishes beyond a reasonable doubt some method was used to replace positive dirty samples during the Sochi Games. The bottle opening method was used again in December 2014 to cover up some dirty samples, which WADA had advised would be removed from the Moscow Laboratory for further analysis.

Unlike the method used during the Sochi Games, the Disappearing Positive Methodology was in operation at IAAF World Championships ("IAAF Championships"). The IP also has evidence that sample swapping occurred after the IAAF Championships in respect of positive samples.

The IP investigation, assisted by forensic experts, has conducted its own experiments and can confirm, without any doubt whatsoever, that the caps of urine sample bottles can be removed without any evidence visible to the untrained eye. Indeed, this was demonstrated in front of Professor Richard McLaren. As will be noted later in this report, evidence of tampering could be detected on bottle caps from Sochi and the December 2014 sample seizure by WADA with the use of microscopic technology.

The fundamental building block of the Sochi scheme was in place. The FSB was intricately entwined in the scheme to allow Russian athletes to compete while dirty. The FSB developed a method to surreptitiously open the urine bottles to enable sample swapping. This keystone step cleared the way for the development of a clean urine bank as a source from which to draw urine samples for swapping. The coordinating role for this aspect of the State run system was that of Irina Rodionova. Rodionova currently sits as the Deputy Director of the Center of Sports Preparation of National Teams of Russia ("CSP") (in Russian "ЦСП"), which is a subordinate organisation of the Russian Ministry of Sport. She was a staff member of the Russian Olympic Committee ("ROC") during the Sochi 2014 Games as the head of the Monitoring and Management of Medical Anti-doping Programs Department and also on the ROC staff for the London 2012 Games as the head of the Medical and Research Department.

Athletes, on instruction, would collect what were thought to be clean urine samples outside of the wash out periods for any PEDs they were using. Rodionova would receive these samples from athletes and arrange for their freezer storage at the CSP. Dr. Rodchenkov would test some of these clean urine samples to ensure they were in fact not positive.

Once the clean urine bank was fully populated by the chosen athletes, the samples were then secretly transported by the FSB from Moscow to the FSB storage freezer in the FSB building located next to the Sochi Laboratory. The bank of clean urine sat in storage awaiting the swapping program at Sochi when required.

The swapping occurred largely as described in *The New York Times* article. Dr. Rodchenkov provided credible evidence that the A and B bottles would pass through the "mouse hole" from the aliquoting room inside the secure perimeter of the Sochi Laboratory into an adjacent operations room, outside the secure perimeter. From there, FSB officer Evgeny Blokhin would take the B bottles and leave the operations room. In the meantime, clean urine from the athletes who had given their sample at a Sochi doping control venue would be withdrawn from the freezer at the FSB building and brought over to the operations room to complete its thawing there. The B sample bottle would be returned to the operations room by FSB Blokhin, open and with the cap removed. The dirty urine disposed of and replaced by clean urine would be put in the A and B bottles. The stopper replaced in the A bottle and the B bottle cap screwed back into place; the bottles would be passed back through the mouse hole thereby reentering the secure perimeter of the laboratory aliquoting room ready for clinical bench work the following morning.

Dr. Rodchenkov's role in the sample swapping scheme included ensuring that the substituted sample was manipulated to match as closely as possible the Specific Gravity (SG) indicated on the original Doping Control Form ("DCF") taken at the Sochi venue. This adjustment was accomplished by adding table salt to raise the clean urine SG or distilled water to dilute the clean urine sample so as to closely match the SG number on the DCF.

The veracity of Dr. Rodchenkov's statements to *The New York Times* article is supported by the forensic analysis of the IP which included laboratory analysis of the salt content of samples selected by the investigative team. The London WADA accredited Laboratory, at the request of the IP, advised that of the forensically representative samples tested, 6 had salt contents higher than what should be found in urine of a healthy human. The forensic examination for marks and scratches within the bottle caps confirmed that they had been tampered with. Both findings support the evidence of Dr. Rodchenkov.

The Sochi sample swapping methodology was a unique situation, required because of the presence of the international community in the Laboratory. It enabled Russian athletes to compete dirty while enjoying certainty that their anti-doping samples would be reported clean. Following the Winter Olympics, the scheme to cover up State sponsored doping returned to the Disappearing Positive Methodology described previously.

The first ARD documentary aired in early December of 2014. The concerns of the international sporting community led to the appointment of the IC, one of the Commissioners of whom was subsequently to become the IP. In connection with the creation of the IC, but not by way of direction of the IC, Dr. Olivier Rabin from WADA asked the Moscow laboratory to prepare for a visit during which the samples stored in the laboratory would be packed up and shipped out of the country for storage and further analysis.

The anxiety level of personnel in the laboratory rose because of the pending WADA visit. The Disappearing Positive Methodology was used during the summer of 2014. As a consequence, Dr. Rodchenkov knew that he would have dirty B samples from that period. A number of dirty samples had been collected and reported as negative, and were stored in the laboratory. The solution to the problem in part was to destroy thousands of samples obtained and stored prior to 10 September 2014, being the minimal 90-day period of storage as prescribed under the ISL. However, the massive destruction of samples only got rid of part of the problem. Still to be dealt with were the samples between 10 September 2014 and 10 December 2014.

Dr Rodchenkov prepared a schedule of 37 athletes whose samples were potentially a problem if another accredited laboratory were to analyze them. A

meeting was held with Deputy Minister Nagornykh in which the jeopardy of the laboratory was discussed were something not done to deal with the selected samples. The upshot of that meeting was that Deputy Minister Nagornykh resolved to call in the "magicians". That night the FSB visited the laboratory and the next day sample bottles were in the laboratory without their caps. The IP found that these samples all had negative findings recorded on ADAMS.

The IP forensic examination of these bottles found evidence of scratches and marks confirmed tampering. A urine examination of 3 of the samples showed that the DNA was not that of the athlete involved.

THE INDEPENDENT PERSON 2nd REPORT

Professor Richard H. McLaren, O.C.

9 December 2016

Chapter 1: Executive Summary of 2nd IP Report

Key Highlights of 2nd Report

Institutionalised Doping Conspiracy and Cover Up

1. An institutional conspiracy existed across summer and winter sports athletes who participated with Russian officials within the Ministry of Sport and its infrastructure, such as the RUSADA, CSP and the Moscow Laboratory, along with the FSB for the purposes of manipulating doping controls. The summer and winter sports athletes were not acting individually but within an organised infrastructure as reported on in the 1st Report.

2. This systematic and centralised cover up and manipulation of the doping control process evolved and was refined over the course of its use at London 2012 Summer Games, Universiade Games 2013, Moscow IAAF World Championships 2013, and the Winter Games in Sochi in 2014. The evolution of the infrastructure was also spawned in response to WADA regulatory changes and surprise interventions.

3. The swapping of Russian athletes' urine samples further confirmed in this 2nd Report as occurring at Sochi, did not stop at the close of the Winter Olympics. The sample swapping technique used at Sochi became a regular monthly practice of the Moscow Laboratory in dealing with elite summer and winter

athletes. Further DNA and salt testing confirms the technique, while others relied on DPM.

4. The key findings of the 1st Report remain unchanged. The forensic testing, which is based on immutable facts, is conclusive. The evidence does not depend on verbal testimony to draw a conclusion. Rather, it tests the physical evidence and a conclusion is drawn from those results. The results of the forensic and laboratory analysis initiated by the IP establish that the conspiracy was perpetrated between 2011 and 2015.

The Athlete Part of Conspiracy and Cover Up

5. Over 1000 Russian athletes competing in summer, winter and Paralympic sport, can be identified as being involved in or benefiting from manipulations to conceal positive doping tests. Based on the information reported to International Federations through the IP to WADA there are 600 (84%) summer athletes and 95 (16%) winter athletes.

London Summer Olympic Games

6. Fifteen Russian athlete medal winners were identified out of the 78 on the London Washout Lists. Ten of these athletes have now had their medals stripped.

IAAF Moscow World Championships

7. Following the 2013 IAAF Moscow World Championships, 4 athletics athletes' samples were swapped. Additional target testing is in progress.

Sochi Winter Olympic Games

8. Sample swapping is established by 2 female ice hockey players' samples with male DNA.

9. Tampering with original sample established by 2 [sport] athletes, winners of four Sochi Olympic Gold medals, and a female Silver medal winner in [sport] with physiologically impossible salt readings.

10. Twelve medal winning athletes (including the above 3) from 44 examined samples had scratches and marks on the inside of the caps of their B sample bottles, indicating tampering.

11. Six winners of 21 Paralympic medals are found to have had their urine samples tampered with at Sochi.

This Report explains these key findings.

1.1 Introduction

This Chapter contains a summary of the principal outcomes of the work of the independent investigation conducted under the direction of Professor Richard H. McLaren, O.C. the Independent Person ("IP") appointed by the World Anti-Doping Agency ("WADA") President. Background and detailed findings of the investigation in a narrative format covering a period from 2011 onwards are provided in subsequent chapters of this Report ("2nd Report").

This 2nd Report details the work of the investigative team conducted between July and November of 2016. In doing so, it sharpens the picture and confirms the findings of the 1st Report and identifies summer, winter, and Paralympic athletes involved in the doping cover-up and manipulation.

Accompanying this second and Final Report is a release of the non-confidential evidence the IP has examined. See the Evidence Disclosure Package ("EDP") at www.ipevidencedisclosurepackage.net. Where practical, this 2nd Report cross-references to the EDP.

Early in the investigation the IP recognised that there was more going on within Russia concerning doping than just what happened in Sochi and involved summer, winter and Paralympic athletes. The 1st Report brought much of the systemic Russian doping control manipulation and cover up into the public purview. This 2nd Report expands upon the scope of the 1st Report and presents the evidence the IP investigative team used to reach its conclusions.

This 2nd Report reflects the work of the IP in concluding the review of all of the information it was able to obtain including witness interviews, databases, emails, and the review of over 4,317 Excel spreadsheets. The pertinent and relevant spreadsheets to support some of the contents of the 2nd Report are included in the EDP. The IP investigative team has examined evidence that identifies over 1000 Russian athletes who appear to have been involved in or benefited from systematic and centralised cover up and manipulation of the doping control process.

1.2 Appointment of the IP

WADA announced the appointment of Professor McLaren as the IP on 19 May 2016. As described in the Terms of Reference, the IP was to conduct an investigation of the allegations made by the former Director of the Moscow Laboratory, Dr. Grigory Rodchenkov ("Dr. Rodchenkov") published in *The New York Times* on 12 May 2016 and aired as a segment of the *60 Minutes* television program on 08 May 2016.

The mandate of the IP was to establish whether:

"…

1. *There has been manipulation of the doping control process during the Sochi Games, including but not limited to, acts of tampering with the samples within the Sochi Laboratory.*
2. *Identify the modus operandi and those involved in such manipulation.*
3. *Identify any athlete that might have benefited from those alleged manipulations to conceal positive doping tests.*
4. *Identify if this Modus Operandi was also happening within Moscow Laboratory outside the period of the Sochi Games.*
5. *Determine other evidence or information held by Grigory Rodchenkov."*

The mandate to the IP from WADA required a report by 15 July 2016. Within the 57 day deadline, the IP published its 1st Report in an effort to provide a factual basis upon which all interested parties might act prior to the Olympic Games in Rio. The reason for having a short reporting deadline was validated early in the investigation when it was realized that the cover up and manipulation of the doping control processes involved many different Olympic sport, both summer and winter, and Paralympic sport and resulted in an early preliminary report to the International Associations of Athletics Federation ("IAAF").

This very compressed time frame prevented the investigation team from examining all of the data it had and more particularly, fulfilling point 3 of the mandate: identifying athletes that may have benefited from manipulations to conceal positive doping tests. As a result, both the IOC[1] and WADA[2] supported the extension of the mandate of the IP to engage in the work that is now represented in this 2nd Report.

1.3 1st Report Key Findings

The 1st Report key findings were:

1. *"The Moscow Laboratory operated, for the protection of doped Russian athletes, within a State-dictated failsafe system, described in the report as the Disappearing Positive Methodology.*

[1] International Olympic Committee (IOC), 2016. *Statement of the Executive Board of the International Olympic Committee on the WADA Independent Person Report*. [press release] 19 July 2016. Available at: https://www.olympic.org/news/statement-of-the-executive-board-of-the-international-olympic-committee-on-the-wada-independent-person-report [Accessed 19 July 2016].
[2] World Anti-Doping Association (WADA), 2016. *WADA acknowledges IOC decision on Russia, stands by Agency's Executive Committee recommendations*. [press release] 24 July 2016. Available at: https://www.wada-ama.org/en/media/news/2016-07/wada-acknowledges-ioc-decision-on-russia-stands-by-agencys-executive-committee [Accessed 24 July 2016].

2. *The Sochi Laboratory operated a unique sample swapping methodology to enable doped Russian athletes to compete at the Games.*

3. *The Ministry of Sport directed, controlled and oversaw the manipulation of athlete's analytical results or sample swapping, with the active participation and assistance of the FSB, CSP, and both Moscow and Sochi Laboratories."*

1.4 Constraints of the 1st Report

The condensed timeframe to produce the 1st Report prevented the IP investigation team from examining all of the data available to it at that time. Some of that data was acquired only days before finalizing the 1st Report in July. Therefore, the IP made the decision to restrict the 1st Report to the data it had fully examined. The IP advised WADA that it would not have time to fulfill the 3rd requirement of the mandate.

The evidence reviewed up to the time of the 1st Report established, beyond a reasonable doubt the conclusion that a systematic cover up and manipulation of the doping control process was going on in Russia and at the Sochi Games.

1.4.1 Response to 1st Report Findings

The fundamentals of what was described in the 1st Report have neither been the subject of criticism nor contested by anyone engaging in a careful and full reading of that report. The world's media, including the Russian media, the various federations and organisations involved, and the Ad Hoc division of the Court of Arbitration for Sport ("CAS") at the Rio Olympic Games, have not disputed the

essential findings or merits of the 1st Report. Indeed, corrective actions announced by the Russian Federation following the issuance of the 1st Report implicitly confirm the contents of the 1st Report.

There was an immediate suspension of the Deputy Minister of Sport Yuri Nagornykh, Anti-doping Advisor to the Minister of Sport, Natalia Zhelanova, and the Deputy Director of the Center of Sports Preparation of National Teams of Russia ("CSP"), Irina Rodionova.[3] By the time of writing this Report, those suspensions turned into formal discharges from office.[4]

As stressed above, the 1st Report dealt with the systemic cover up and manipulation of the doping control process. It did not report on individual athletes. After its release, the IOC chose to take actions based upon the Report from the perspective of individual competitors, in contrast to the International Paralympic Committee ("IPC"), which chose to take actions based upon the Report for what it was – a description of a systemic system of cover up and manipulation of the doping control process.

The 1st Report set off a chain reaction that resulted in the IP receiving dozens of information requests from International Federations and the IOC. These requests were particularly critical as the Rio Olympic Games were only days away.

[3]Luhn, A., 2016. *Russian officials claim athletes were targeted unfairly in Wada doping*. The Gaurdian [online] 18 July 2016. Available at: https://www.theguardian.com/sport/2016/jul/18/russia-athletes-targeted-unfairly-wada-doping-report [Accessed 06 December 2016].
[4] Ziegler, M., 2016. *Russia must admit doping programme.* The Times [online] 20 November 2016. Available at: http://www.thetimes.co.uk/article/russia-must-admit-doping-programme-g3nnld76h [Accessed 06 December 2016].

In addition, the investigative team responded to 9 cases that were before the Ad Hoc division of CAS at the Rio Olympic Games and the CAS regular division[5]. Responding to this litigation absorbed the investigative team's efforts for the month of August 2016 before, during and after the Rio Olympic Games.

1.5 Completion of the IP's Mandate

The mandate from the outset has been to examine evidence to determine if:

i. There had been a manipulation of the "doping control process" used at the Sochi Games; and,

ii. The *Modus Operandi* of the Moscow Laboratory outside the period of the Sochi Games.

In addition the IP was requested to identify those involved in such manipulations and athletes that may have benefited therefrom.

[5] See: (i) Arbitration CAS anti-doping Division (OG Rio) AD CAS OG 16/02 & 03 Vladimir Morozov and Nikita Lobintsev v. International Olympic Committee (IOC) & Fédération Internationale de Natation (FINA),case was withdrawn, http://www.tas-cas.org/fileadmin/user_upload/Report_on_the_activities_of_the_CAS_Divisions_at_the_2016_Rio_Olympic_Games__short_version__FINAL.pdf [Last Accessed on 1 December 2016];
(ii) Arbitration CAS ad hoc Division (OG Rio) 16/004 Yulia Efimova v. Russian Olympic Committee (ROC), International Olympic Committee (IOC) & Fédération Internationale de Natation (FINA), award of 5 August 2016 (operative part of 4 August 2016); (iii) (iv) Arbitration CAS ad hoc Division (OG Rio) 16/012 Ivan Balandin v. Fédération Internationale des Sociétés d'Aviron (FISA) & International Olympic Committee (IOC), award of 6 August 2016 (operative award of 4 August 2016); (iv) Arbitration CAS ad hoc Division (OG Rio) 16/019 Natalia Podolskaya & Alexander Dyachenko v. International Canoe Federation (ICF), award of 8 August 2016 (operative part of 7 August 2016); (v) Arbitration CAS ad hoc Division (OG Rio) 16/018 Kiril Sveshnikov, Dmitry Sokolov & Dmitry Strakhov v. Union Cycliste Internationale (UCI), award of 8 August 2016 (operative part of 5 August 2016); (vi) Arbitration CAS ad hoc Division (OG Rio) 16/021 Elena Anyushina & Alexey Korovashkov v. International Canoe Federation (ICF) & Russian Canoe Federation (RCF), award of 11 August 2016; (vii) CAS OG 16/10 Andrey Kraytor v. IOC & International Canoe Federation (ICF), the application was withdrawn; (viii) Arbitration CAS ad hoc Division (OG Rio) 16/024 Darya Klishina v. International Association of Athletics Federations (IAAF), award of 16 August 2016 (operative part of 15 August 2016); (ix) CAS 2016/A/4745 Russian Paralympic Committee v. International Paralympic Committee (operative part of 23 August 2016).

The IP's work since July has primarily focused on identifying athletes who may have been involved in or benefited from the manipulations and cover ups of the anti-doping control processes found to have occurred in the 1st Report. In fact, it is this latter point that the IP is reporting upon, and providing evidence thereof, from both this 2nd Report and the earlier one.

This Report adds to the body of information already released while re-examining prior witnesses and examining new witnesses. Most, but not all, of the information used for both Reports is contained in the EDP.

1.6 IP Investigative Method

Immediately following the establishment of the IP's mandate, an initial meeting with Dr. Rodchenkov was conducted, wherein he provided a dossier of information from which the IP investigation was launched. Very quickly thereafter, the IP embarked on its investigation directed at determining the factual veracity of his public pronouncements. Early on, the investigative team recognised that there was far more to look into than just what went on in the Sochi Laboratory. It was apparent from that time forward, that the cover up and manipulation of the doping control processes involved many different Olympic sports, both summer and winter as well as Paralympic sport.

With this in mind, the IP wrote to the IAAF Task Force in June 2016, reporting on evidence it had obtained involving what was later described in the 1st Report as the Disappearing Positive Methodology ("DPM"). That communication led to a chain of events by the IAAF culminating in the decision not to permit the Russian Athletics Team from participating at the 2016 Rio Olympic Games.[6]

The IP engaged in: interviewing witnesses; analysing hard drives; and obtaining and reviewing a wide variety of documentary evidence. From this information, the IP developed an understanding of the cover up and manipulation of doping control processes conducted within Russia. In order to corroborate some of the information obtained through interviews, a variety of forensic and laboratory analytical work and expert evaluations of the same were undertaken.

Fundamental to the assessment of the accuracy of the allegations surrounding activity within the Sochi Laboratory was the need to determine if the B urine sample bottle caps could be removed to enable the contents to be swapped and then re-screwed on to the bottle without leaving evidence of tampering visible to the untrained eye. No interviewed witness ever observed the removal of the bottle caps, which the IP in its 1st Report established, did occur. In order to verify the truth of Dr. Rodchenkov's disclosures, the IP engaged a world recognized expert in firearms and toolmarks examinations to conduct an experiment on its behalf on unused Sochi

[6] 17 June 2016: IAAF announced that ARAF has not met conditions for restatement of membership; 21 June 2016: IAAF announced that all ARAF athletes are suspended from international competition; 23 June 2016: IAAF published exceptional eligibility guidelines for international competition under Rule 22.1A for Russian athletes who can either demonstrate they have not had any involvement in doping or that they have made a contribution to the fight against doping; 1 July 2015: IAAF announced that Yuliya Stepanova is eligible to compete internationally as a neutral athlete

B bottles. The experiment verified that the removal and re-screwing of the cap onto the bottle could be accomplished without leaving visible signs of tampering to the untrained eye.

The investigation focused principally on the following areas:

- Interviewing a number of witnesses some of whom were reluctant or refused to provide information for fear of retaliation and abuse they might receive.
- Recognising the level of fear amongst direct witnesses, the IP sought out forensic evidence and laboratory analytical evidence to establish facts in connection with Russian competitors at the London Games 2012, IAAF Moscow World Championships 2013, the Sochi Games 2014 and generally throughout the period 2011-2015. The immutable forensic and scientific facts support and corroborate the interviews of Dr. Rodchenkov by the IP. Also operating to ensure the truth of those interviews was the possibility of deportation from the United States should he be shown to have been untruthful to the IP. The coupling of the immutable facts and this incentive makes Dr. Rodchenkov a reliable witness within the context of the mandate of the IP.
- The IP sought but was unable to obtain Moscow Laboratory server or sample data. On request, such computer records were unavailable to the IP and the samples in the storage area had been sealed off by the Investigative Committee of the Russian Federation.

- The IP conducted cyber and forensic analysis of documentary evidence retrieved from hard drives and backups of Dr. Rodchenkov's laptop and access to emails.
- Through forensic analysis, the IP restored deleted documentation on the hard drives available to the investigative team.
- The metadata of all of the electronic documents upon which the IP relies have been examined and determined to have been made contemporaneously to related events.
- From the documentation retrieved on the hard drives, the IP created a working database. From the database, the following was done:
    - Reviewed 4,237 Excel schedules, thousands of documents and emails;
    - Cross-compared information available in the database against records in the Anti-Doping Administration and Management System ("ADAMS") to identify false entries;
    - Used intelligence gathered by the IP to identify witnesses to be interviewed and determine what they knew about the inquiry subject matter; and
    - Used the intelligence to identify specific samples for laboratory and forensic analysis.
- The IP conducted an experiment using a firearms and toolmarks examinations expert from a UK based, internationally recognised, forensic testing organisation. For reasons of security their details remain undisclosed.

- Conducted laboratory analysis to determine the salt level in samples obtained from the Sochi Games 2014 and other samples; retained experts to interpret the analytical results.
- Conducted DNA analysis on samples swapped at Sochi and elsewhere and undertook a search to identify same athlete suitable comparator DNA samples located throughout the world which were used to check inconsistencies in the DNA of Sochi and other samples. The IP retained experts to conduct and interpret the DNA analysis and where DNA was inconsistent, the B bottle was checked for scratches and marks.
- Identified potential samples held by the IOC, the IAAF and the IPC to be retested for long-term steroid metabolites.
- Analysed and evaluated technical evidence.
- Reviewed evidence for potential violations of the World Anti-Doping Code.

The IP encountered reluctance on the part of individual athletes and others to come forward to meet with the investigative team. In order to overcome that reluctance, the IP sought to meet Russian officials once the investigative process to identify facts was complete, so as to enable a meaningful discussing with the officials. On 13 October 2016 in Zurich, Switzerland, the IP and his Chief Investigator met with Mr. Vitaliy Smirnov, who was appointed by President Putin as the Chairman, Independent Public Anti-Doping Commission; Mr. Smirnov was accompanied by Mr. Leonoid Miroshnichenkov. The IP and his Chief Investigator also had the opportunity to meet with the new Minister of Sport, Pavel Kolobokov, in Budapest on 29 November 2016, who was accompanied by Mr. Artem S. Yakubov, Head of the

International Cooperation Division of the Ministry of Sport. The IP recognised that a meeting with the newly appointed Deputy Prime Minister, Vitaly Mutko, would be important to the inquiry as to the future of Sport in Russia. Unfortunately, the IP and Deputy Prime Minister Mutko were unable to make suitable meeting arrangements.

In addition, on 12 October 2016 in London, England the IP met with Judge Canivet, IOC Ethics Commission Vice-Chair appointed by the IOC Executive Board as the Chairman of the IOC Disciplinary Commission. The requests of Judge Canivet could not immediately be accommodated, as explained in correspondence to him following the meeting (EDP1164). An offer was extended by which the IP would assist him in any way possible following the publication of this 2nd Report. The IOC also established a second Disciplinary Commission, headed by IOC member Denis Oswald to investigate doping results. No official requests for information were made by either the IP or Mr. Oswald, although one brief discussion occurred at a conference in Zurich, Switzerland.

Members of the investigation team were in regular contact with the office of the IOC's Medical and Scientific Director. Cooperation with the IOC involved transporting samples, testing those samples, assisting the IOC with intelligence gathered by the IP indicating prospective samples to be targeted for retesting and for the prohibited substances they should be retested for. Similar cooperation occurred with the IPC, the IAAF and Fédération Internationale de Natation ("FINA").

1.7 Chronology of Events

Pre 2011	"In the field" doping- oral turinabol continued in use by coaches and doctors, sample substitution with corrupt DCOs.
Late 2011	IP's first indication of Disappearing Positive Methodology.
2011	Dr. Rodchenkov develops test for long term metabolites for oral turinabol.
01 Jan 2012	WADA Regulatory Change - ISL changed to require all sample results be reported into ADAMS.
2012	Moscow Laboratory reports false negatives into ADAMS.
2012	Dr. Rodchenkov develops "duchess" cocktail.
May-July 2012	WADA directed target testing of various Russian athletes.
19 July 2012 – 2 August 2012	Moscow Laboratory conducts washout testing in Bereg kits, all results reported negative in ADAMS, some athletes on cocktail and some on coach administered oral turinabol.
August 2012	London Games
27 September 2012	WADA requests A and B bottles of 67 samples collected between May and July 2012 to be sent to Lausanne Laboratory.
27 September 2012	Dr. Rodchenkov swaps or tampers with A samples for 10 athletes he knows are dirty. Cannot open B samples.
February 2013	First time FSB successfully removes caps from B sample bottles.
July 2013	Trial run of sample swapping at Universiade Games in Kazan.
4 July 2013 – 1 August 2013	Athletes washout urine samples prior to IAAF Moscow World Championships in non-official containers.

August 2013	IAAF Moscow World Championships- sample swapping after the event.
Late 2013 – February 2014	CSP collects athlete's clean urine for later sample swapping.
1 January 2014	WADA Regulatory Change – All athlete urine steroid profile must be uploaded into ADAMS.
February 2014	Sochi Olympics – B bottles opened and urine samples swapped.
Remainder 2014	Moscow Laboratory uses technique applied at Sochi to swap samples on monthly basis and falsifies or does not record results of athlete steroid profiles.
04 December 2014	1st ARD Documentary into doping in Russian Athletics.
17 December 2014	WADA unannounced visit to Moscow Laboratory, seizure of over 3500 samples.
July 2015	FSB bottle opening team disbanded.
November 2015	Independent Commission Report Part I
January 2016	Independent Commission Report Part II
May 2016	Dr. Rodchenkov whistleblower New York Times Article
18 July 2016	1st IP Report
05-21 August 2016	Rio 2016 Olympic Games
07-18 September 2016	Rio 2016 Paralympic Games
9 December 2016	2nd IP Report

1.8 Highlights

Chapter 2: Athletes Benefiting from Manipulations and Concealment of Positive Tests

The IP is not a Results Management Authority under the World Anti-Doping Code (WADC 2015 version). The mandate of the IP did not involve any authority to bring Anti-Doping Rule Violation ("ADRV") cases against individual athletes. What was required is that the IP identify athletes who might have benefited from manipulations of the doping control process to conceal positive doping tests. Accordingly the IP has not assessed the sufficiency of the evidence to prove an ADRV by any individual athlete. Rather, for each individual Russian athlete, where relevant evidence has been uncovered in the investigation, the IP has identified that evidence and is providing it to WADA in accordance with the mandate. It fully expects that the information will then be forwarded to the appropriate International Federation ("IF") for their action.

The main highlights regarding the identification of athletes who have benefitted from this manipulation include:

i. 695 Russian athletes and 19 foreign athletes can be identified as part of the manipulations to conceal potentially positive doping control tests. That manipulation came in various forms and was carried out by different parts of the sports infrastructure within Russia. The IP information on these athletes

has been forwarded to WADA for transmission to the International Federations.

ii. The IP analyzed 44 B urine bottles from Sochi Olympic athletes known to have been protected[7] or on the female ice hockey team. Their urine bottles showed evidence of scratches and marks indicating tampering. When the corresponding A sample bottles were analysed for salt concentration, 6 samples contained more salt than physiologically possible in the urine of a healthy human, and 2 samples contained salt concentration below what is physiologically possible in the urine of a healthy human. The results establish that the urine contents had been swapped or tampered with.

iii. Nineteen of the corresponding A bottles of the 33 protected athletes' B samples were examined for DNA. As expected, because the scheme was to swap dirty urine with the athlete's own clean urine, no inconsistences were found for the athletes known to have been protected.

iv. DNA analysis of samples from female hockey players who were initially not part of the protected athletes were conducted. That investigation revealed male DNA in 2 female hockey player urine samples. That evidence provides incontrovertible confirmation that the original urine samples had been tampered with and swapped.

[7] Referred to in the report as the Sochi Duchess List of protected athletes. This list was prepared before Sochi and included athletes known to be taking the cocktail and for whom the CSP was collecting clean urine to be stored in the urine bank at the Command Center and used to swap the athletes' dirty urine for their own clean during the Games.

v. The IP is in possession of a total of 26 samples from 25 different Russian athletes, who competed in 16 winter, summer and Paralympic sports and who were identified on a dirty sample list.[8] DNA analysis established that 10 of these samples had DNA mismatches and other inconsistencies. There are scratches and marks evidence on 25 of the B sample bottles. One sample does not have scratches and marks because it was not required to be opened.

vi. 246 athletes can be identified as potentially knowingly participating in manipulation thereby raising the possibility of a violation of WADA Code Article 2.5 (tampering). Athletes who provided clean urine to the CSP in advance, which was then swapped for a dirty sample, which he or she provided during the Sochi Games, could be in violation of Code Article 2.5. Furthermore, to the extent Russian athletes participated in washout testing with the expectation that their samples containing Prohibited Substances would never be reported, they too potentially engaged in tampering.

vii. Potential Violations of Code Article 2.8/2.9 (doping and cover up). The IP has identified athletes who have benefited from manipulations of the doping control process to conceal potential positive results. The cover up and manipulation of doping control processes involved officials in the Ministry of Sport ("MofS"), CSP, and Federal Security Service ("FSB") as well as other

[8] The December 2014 List of 37 Dirty Samples were samples that Dr. Rodchenkov knew were dirty and potentially needed to be swapped before WADA arrived to secure and seize samples from the Moscow Laboratory in December 2014. See Chapter 7.

sport officials and coaches. Also included were both the Russian Anti-Doping Agency ("RUSADA") and the Moscow Laboratory. The extent to which athletes may be in violation of these Code Articles, depends upon evidence within the control of the international and national federations and Russian officials.

viii. The IP has identified one weightlifting athlete's sample which is a possible violation of WADA Code Article 2.1. The laboratory results have been forwarded to the International Federation for results management.

ix. The intelligence the IP has obtained regarding all the samples from the Russian teams that competed at the 2011 IAAF Daegu World Championships, the 2012 London Olympic Games and the 2013 IAAF Moscow World Championships, has been provided to IOC and IAAF for action.

Chapter 3: The Moscow Laboratory and the Disappearing Positive Methodology ("DPM")

By 2011 work had begun on what became the conspiracy in doping in Russian sport. The rudiments of what would become the well-oiled systemic cheating scheme to enable Russian athletes to compete while doping was being put in place. This most recent effort appears to have been triggered by Russia's poor showing at the Vancouver Olympic Games in 2010.

The 1st IP Report uncovered the genesis of the Russian cover up and manipulation of the doping control processes. The Russian program ensured that if any doped athletes within the doping system did not achieve protection by the various in the field mechanisms in place during the sample collection and transportation process, the final, fail-safe mechanism operating at the Moscow Laboratory, the DPM, guaranteed non-detection. It did so by transforming a positive initial testing procedure ("ITP") result into a negative one on the direction of the MofS requiring the operational analytical process of the Moscow Laboratory be halted and a false record or no record filed in ADAMS.

The extended time granted to produce this 2nd Report reveals a clearer and sharper focus to the DPM.

i. The IP now has records revealing that more than 500 positive ITP results were reported negative into ADAMS, compared to 312 as set out in the 1st Report.

ii. The IP now has evidence which reveals that well-known and elite level athletes had their initial ITP results automatically falsified.

iii. Aside from email, additional communication methods were found in connection with the DPM, (such as SMS messaging and Excel spreadsheets).

Chapter 4: The Olympic Games Year and London 2012

In 2012 Dr. Rodchenkov's team's breakthrough work on detection of peptides and long-term steroid metabolites of prohibited substances was published.[9] This was a significant contribution recognised by their colleagues heading other WADA accredited laboratories. However, he was working at cross-purposes. While appearing to be at the forefront of the development of doping detection science he was secretly developing a cocktail of drugs with a very short detection window, colloquially known as the "Duchess," to assist athletes to dope and evade doping control processes. In other words, he was simultaneously improving the doping control system while using that knowledge to undermine its efficacy and integrity. The same activity functioned simultaneously to ostensibly "protect" clean athletes and further advance the Russian doping conspiracy. This knowledge by the Director of the Moscow Laboratory assisted the Russian team for the London Olympics.

In preparation for the London Olympics, washout testing was used to determine whether those athletes on a doping program were likely to test positive at the Games. The washout testing was used to ensure that the transition from the older doping program (oral turinabol, for example) to the Duchess cocktail was in effect and would result in no positive analysis of Russian samples at London 2012.

[9] Sobolevsky T and Rodchenkov G (2012) "Detection and mass spectrometric characterization of novel long-term dehydrochloromethyltestosterone metabolites in human urine", J. Steroid Biochemistry & Molecular Biology, 128, 121-127.

The weakness of the "in the field" doping programs was that individual coaches were still managing athlete's doping practices. There was, therefore, no guarantee that it would be effective.

This being said, at the actual Games in London 2012 there were no positive Russian analytical results. In two batches of retesting by the IOC there already are 11 Russian athletes who retested positive – at least 6 of these athletes retested positive for turinabol and stanozonol, both classic anabolic steroids used in the German Democratic Republic. Retesting of London 2012 samples by the IOC is ongoing.

After the Games, it was determined that a more centralised system would be required to enable the cover up at the Sochi Olympic Winter Games and the Paralympic Games.

Below are the highlights that relate to the London 2012 Olympic Games.

i. The saga of the 67 samples (discussed in Chapter 4) involves the collection of samples prior to London 2012. In 10 of those samples, the contents of the A bottle were swapped by the Moscow Laboratory, while the B samples remained unopened and dirty, demonstrating the weakness of falsifying entries into ADAMS by swapping only A samples.

ii. The unexpected request by WADA to the Moscow Laboratory in October 2012 to forward the 67 A and B samples triggered an A bottle urine swap and was

a catalyst leading to the initiation of the project on how to open the B sample bottles.

iii. The practices of using official doping control kits for the purposes of washout testing was recognised by the Moscow Laboratory as leaving an audit trail which could reveal the DPM. Change was required.

iv. The IP cooperated with the IOC by providing intelligence indicating specific prohibited substances to be targeted in their London 2012 retesting program. A total of 54 athletes' samples are been retested.

Chapter 5: IAAF Moscow World Championships and Events of 2013

The experiences of 2012 and the London Games meant that a unique system of manipulation of doping controls would be required to be in operation at the Sochi Laboratory.

The year 2013 was the game changer in the planning for Sochi. Two major international events held on Russian soil provided the opportunity for a trial run of the new doping cover up method.

Following London 2012, weaknesses in the washout testing and doping cover up scheme became evident. The covering up of falsified ADAMS information only worked if the sample stayed within the control of the Moscow Laboratory, and was

later destroyed. Given that Bereg kits are numbered and can be audited or also seized and tested, the Laboratory realised that it would be only a matter of time before the cover up and manipulations were discovered and the contents of the B sample bottles would not match the entry into ADAMS.

Thanks to the work of the Federal Security Services ("FSB"), it is the first time that the B sample bottle is opened and the cap re-screwed on to the bottle without leaving marks and scratches on the inside of the cap, visible to the untrained eye.

The first trial run of the sample swapping occurred at the 2013 Universiade Games and was replicated at the IAAF Moscow World Championships (Moscow Championships). Upon the completion of the Moscow Championships, dirty samples of at least 4 Russian Athletics athletes were swapped, including a sample belonging to Tatyana Lysenko.[10] The IP has provided this intelligence to the International Association of Athletics Federations ("IAAF") in addition to names of another 32 athletes.

Below are the highlights that pertain to: the 2013 period generally; the 2013 Universiade Games and the IAAF Moscow World Championships.

i. After the 1st Report, the IP obtained one observation of the tools developed and used by the FSB to open the B sample bottles. The tools are similar to those developed by the IP's expert for its experiment.

[10] Tatyana Lysenko has been stripped of her medals from London 2012 by IOC Disciplinary committee. Her case has been referred to the IAAF.

2013 Universiade Games

ii. The first trial run of B sample swapping occurred at these Games. It represented the first opening of B samples at a competition. The weakness identified in 2012 was overcome.

2013 IAAF Moscow World Championships

iii. Washout testing samples collected exclusively in unofficial containers thereby circumventing the audit trail created by using official doping control kits. The weakness identified in 2012 was overcome.

iv. Thirty-three athletes have been referred to IAAF for retesting as a result of the IP investigation. Results are unknown at the time of publication.

Chapter 6: Sochi 2014 The XXII Olympic Winter Games

At the opening of the Olympic year 2014, the improvement of prior years had been implemented and planning in earnest for the winter Olympic games was in progress.

The Winter Olympics in Sochi debuted the ultimate fail-safe mechanism in the Russian's sample swapping progression. A protected winter Olympics competitor likely to medal did not have to worry about his or her doping activities. They could

dope up to, and possibly throughout, the Games as they could count on their dirty sample being swapped at the Sochi Laboratory.

Prior to the night-time sample swapping, the athlete's clean urine would be withdrawn from the FSB Command Center controlled urine bank. The samples were placed in the operations room to be thawed and adjusted for specific gravity, where required before sample swapping occurred. As described in the 1st Report, during the night, the samples were passed through, what the IP described as "a mouse hole," from inside the Laboratory's secure perimeter to an adjacent operations room contiguous to the secure perimeter. The B sample bottles were picked up and returned by an FSB officer, open, with the caps removed. The dirty urine would be disposed of in both A and B samples and replaced with the athlete's own clean urine, and the bottles passed back through the mouse hole.

The work of the IP team within the extended period to complete the IP mandate resulted in the following highlights:

i. Six Paralympic athletes winning a total of 21 medals all had their samples swapped.

ii. Two [sport] athletes, winners of 4 Sochi Olympic Gold medals, and a female Silver medal winner in [sport] had samples with salt readings that were physiologically impossible. That scientific determination provides uncontradicted evidence of tampering with the original sample.

iii. The quantity of forensic and analytical evidence increased substantially in respect of the existence and use of sample swapping. Forensic experiments and laboratory analytical work provide additional confirmation of the 1st Report conclusions.

iv. Two female hockey player samples contain male DNA. Eight Sochi samples revealed salt content not physiologically possible in a healthy human. The DNA and salt analyses corroborate *viva voce* evidence of tampering with the urine samples.

v. The number of samples exhibiting scratches and marks on the inside of the bottle caps increased by examining a greater number of B samples and provides further confirmation of opening and tampering with sample bottles.

Chapter 7: Samples Swapping After Sochi

The Russian cover up and manipulation of the doping process did not end with the Sochi Games. The balance of 2014 saw the use of the methodology developed for Sochi on various occasions to open the B bottle samples to enable sample swapping.

i. Sample swapping technique used at Sochi became a regular monthly practice of the Moscow Laboratory.

ii. WADA action requiring steroid profile reports result in Russian reaction to also falsify steroid profiles in ADAMS.

iii. No direct instructions from the MofS required to swap samples involving high profile summer and winter athletes.

iv. Close of the year, the last known opening of B samples occurred when the FSB "magicians" were called in to the Laboratory as a result of the WADA visit to seize samples.

1.9 Conclusion

I would like to thank WADA for the trust they placed in me to supervise this investigation. I also want to thank all of my very hard working investigative team. I owe each of them very grateful thanks for their assistance. My thanks to Diana Tesic, lawyer, who worked diligently with me on the report and did most of the translation work; Martin Dubbey my Chief Investigator who was relentless in his pursuit of the investigative information along with many of his staff; Richard Young, my counsel; Dr. Christiane Ayotte, my scientific advisor; Matthieu Holtz who interfaced with WADA and assisted on sample work; and, three Western University law students who did background research: Kaleigh Hawkins Schulz, Karen Luu and Rebecca Curcio.

Finally, the investigation is now finished. I have tabled two Reports that taken together paint a detailed, but not fully complete picture of the doping control

processes in Russia. It is time for everyone to step down from their positions and end the accusations against each other. I would urge international sport leadership to take account of what is known and contained in the Reports, use the information constructively to work together, and correct what is wrong.