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INDEPENDENT PERSON
WADA INVESTIGATION OF SOCHI ALLEGATIONS

16 July 2016

Via Email: Olivier.Niggli@wada-ama.org to be forwarded

President Sir Craig Reddie
World Anti-Doping Agency
Stock Exchange Tower
800 Place Victoria (Suite 1700)
Montréal, QC H4Z 1B7

Re: Report to the President of WADA by the Independent Person

Dear President Reddie:

I, as the Independent Person, have completed the enclosed Report, dated 16 July 2016, which is submitted to you pursuant to the Terms of Reference that established the Independent Investigation. This Report fulfills partially the mandate of the Independent Person. I appreciate having had the opportunity to be of service.

Yours truly,



Richard H. McLaren
IP in Sochi Investigation

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THE INDEPENDENT PERSON REPORT

18 July 2016

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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.

Chapter 2: The IP Investigation Method

2.1 Introduction

On 08 May 2016, the American CBS newsmagazine, *60 Minutes*, aired a story of doping allegations occurring during the Sochi Games. During a segment of the *60 Minutes* program, whistleblower, Mr. Vitaly Stepanov, a former employee of the Russian Anti-Doping Agency (RUSADA), revealed systematic doping inside the Russian athletics team. Stepanov also exposed doping misconduct by Russian athletes and their entourage members at the Sochi 2014 Games that had not previously been in the public domain. On the basis of recorded conversations between Stepanov and the former Director of the WADA-accredited Moscow Anti-Doping Laboratory (the “Moscow Laboratory”), Dr. Grigory Rodchenkov (“Dr. Rodchenkov”), the broadcast claims that numerous Russian athletes were doped at Sochi, including four gold medalists that were using steroids.

The New York Times published the article, “*Russian Insider Says State-Run Doping Fueled Olympic Gold*,” on 12 May 2016 alleging that:

“[d]ozens of Russian athletes at the 2014 Winter Olympics in Sochi, including at least 15 medal winners, were part of a state-run doping program, meticulously planned for years to ensure dominance at the

Games, according to the director of the country's anti-doping laboratory at the time."¹

Following these news publications, the World Anti-Doping Agency ("WADA") announced that Professor Richard H. McLaren was appointed as the Independent Person ("IP") to lead an investigation into the allegations arising from the two above news sources.

2.2 The Investigation Process

Subsequent to the creation of the IP, a meeting was held in Los Angeles, California on 20 May 2016. The Los Angeles meeting provided the IP with background that Dr. Rodchenkov supplied through his chosen intermediary. Some of the members of the IP investigative staff were present. The IP attended via Skype, as did Dr. Rodchenkov.

Following that meeting, the IP acted quickly to pull together his investigative team. Included were: Chief Investigator Martin Dubbey, Montreal Anti-Doping Laboratory Director, Dr. Christiane Ayotte, lawyer and the IP Russian language support, Diana Tesic, WADA investigation department Mathieu Holz, Richard Young, Esq., two Western University Law students, Karen Luu and Kaleigh

¹ Ruiz, R., and Schwirtz, M., 2016. Russian Insider Says State-Run Doping Fueled Olympic Gold. [Online] Available at: http://www.nytimes.com/2016/05/13/sports/russia-doping-sochi-olympics-2014.html?_r=0 [Accessed 15 July 2016].

Hawkins-Schulz. Expert forensic personnel were engaged who were capable of performing marks and scratches detection, DNA analysis and finger printing, digital data review and analysis, including restoration of deleted data and other cyber forensic personnel. In addition Dr. David Cowan Director of the Drug Control Centre and the DNA analysis unit at Kings College, London (“DCC”) provided the use of his laboratory and did the laboratory analytical work for the IP.

In particular I would like to thank Martin Dubbey. He led the inquisitorial and investigative aspects of the investigation and brought with him other skilled individuals in his organization that were instrumental in establishing the forensic aspects of this Report and targeting the appropriate samples that required testing in an accredited laboratory. I would also like to thank all of the experts involved in our team who equally deserve recognition for producing an excellent piece of work in an all too short a time. They all responded to the call for speedy action.

I would also like to thank the two athlete representatives, Beckie Scott, Chair of the WADA Athletes’ Committee and WADA Executive Board Member, and Claudia Bokel, Chair of IOC Athletes’ Commission and IOC Executive Board Member. They participated in the Los Angeles meeting and I kept them informed as the investigation progressed, but, recognizing that the sensitivity of

what I was doing, meant I could share with them only general non-sensitive information. I was pleased to be able to invite them to the London WADA accredited laboratory when we began the laboratory analytical phase of the investigation. They attended and participated in doing some of the random selection of samples for analysis. Not a major role, but one that should provide some confidence to the clean athletes of the world, whom they represent, that the IP was competent and effective in targeting the correct evidence in carrying out its work.

2.3 The Investigation Procedure

The IP and his investigators interviewed and personally met the principal witness, Dr. Rodchenkov. I have concluded that Dr. Rodchenkov is credible and truthful in relaying to me the testimony he gave which is the subject matter of this Report. I am aware that there are allegations against him made by various persons and institutional representatives. While that might impinge on his credibility in a broader context, I do not find that it does so in respect of this Report. I reach that conclusion because the forensic and laboratory scientific evidence that I have gathered corroborates that he has been completely truthful in his interviews with me. Therefore, I did not hesitate in coming to the conclusion that within the context of the subject matter that was my mandate he is a credible and truthful person. I do not need to go further afield in assessing his credibility as it is beyond the scope of my inquiry.

The IP interviewed a number of other individuals on a confidential basis. Some were interviewed at the request of the IP investigation team and others came forward voluntarily.

The IP did not seek to interview persons living within the Russian Federation. 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 Russian government officials and did not think it necessary, having already done so previously 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.

All the allegations that were made have been followed up by the IP and Findings have been made along with revealing other evidence discovered during the course of the investigation. The allegations, which we find to have been established, attack the principle of clean sport and clean athletes which are at the very heart of WADA's *raison d'être*.

2.3.1 IP Findings

1. Dr. Rodchenkov, in the context of the subject matter within the IP mandate, was a credible and truthful person.
2. All other witnesses interviewed by the IP investigative team were credible. Their evidence was only accepted where it met the standard of beyond a reasonable doubt.

2.4 The IAAF Taskforce

As a result of the IC November 2015 Report, the International Association of Athletics Federation (IAAF) declared on the Friday following the report that the All Russian Athletics Federation would “be provisionally suspended on the grounds that it had breached the objects of the IAAF pertaining to eradicating doping and safeguarding the authenticity and integrity of sport.” In order to regain IAAF membership, a list of criteria was imposed on All Russian Athletics Federation (“ARAF”) and a Taskforce was established to determine whether the criteria had been met.

The Taskforce was required to report to the IAAF Council on 17 June 2016. The IP was conscious of the information in the press regarding the projected outcome of the IAAF Council decision. On 22 May 2016, three days after the IP had been appointed, Rune Andersen the chair of the IAAF Taskforce, wrote to me seeking my co-operation and assistance in providing information to the Taskforce. By the time the Taskforce was to report their findings, it was less than a month following the appointment of the IP. Despite the fact that it was early in the investigation, I decided that, in good conscience knowing what I knew at that time, I ought to fulfill the request of co-operation and provide the Taskforce information that I knew met the highest level of legal proof of beyond a reasonable doubt.

With the knowledge I had learned, I did not want the IAAF Council to make a decision without them being able to assess the information I had. I simply could not sit back and stay silent on the grounds that my investigation was on going and incomplete. In light of the information available to the IP at the time I decided to write a letter to the Taskforce. I also wanted there to be no doubt that I had done so. Therefore, I elected to publish my statement on the Canadian wire service. The fact that I did this, together with a copy of my statement is available on WADA's website WADA.²

² World Anti-Doping Agency, 2016. [Online] Available at: <https://www.wada-ama.org/en/media/news/2016-06/wada-supports-iaaf-decision-to-maintain-russian-athletics-federation-suspension> [Accessed 15 July 2016].

2.4.1 IP Findings

1. The ongoing work of the IP investigation after the letter to the IAAF reinforced the conclusions therein.

2.5 The Mandate

The IP mandate was to corroborate or refute the allegations as reported and placed in the public domain by Dr. Rodchenkov by conducting a thorough and comprehensive investigation. The investigation required a forensic examination of carefully selected doping control bottles and the urine contained therein from the Sochi Games, as well as from the doping control bottles seized from the Moscow Laboratory in December 2014.

Olivier Rabin wrote to Dr. Rodchenkov in December 2014 requesting to secure and save all the samples being held at the Moscow Laboratory. There were some 10,000 samples in the Laboratory at the date of that letter. Shortly after its receipt in Moscow, the Laboratory destroyed some 8,000 samples it held dated prior to 10 September 2014. The IC reported on this in its first Report, which the IC believed at the time the number was much lower.

The compressed time frame in which to compile this Report has left much of the possible evidence unreviewed. This Report has skimmed the surface of the data

that is available or could be available. As I write this Report our task is incomplete. There is much data that we have yet to translate and examine. Those matters will require further work. There is no doubt there is more to be revealed. However, we are confident that what we have found meets the highest evidentiary standard and can be stated with confidence. Any matters where I felt the evidence did not meet the standard of beyond a reasonable doubt have not been included in this Report. In order to demonstrate that we have hard credible evidence we have chosen to publish selected portions of the evidence we have obtained. The volume of supporting information is too extensive to publish in this Report. I also do not wish to put anyone at risk with the information I have reported.

Chapter 3: The Moscow Laboratory & the Disappearing Positives

Although the IP investigation began with a focus on the Sochi allegations, it became increasingly evident that a much wider investigative scope beyond Sochi was required. The collected evidence assessed and corroborated through the course of this investigation has uncovered a simple and effective system operated to conceal Russian athletes' PED use in order to allow them to compete at national and international competitions. The Moscow Laboratory was an integral participant in the operation of this system. It therefore becomes critical to understand how the Moscow Laboratory functioned within the State system in order to fully appreciate the unique scheme that was developed for the Sochi Games.

This chapter describes the system as alleged by the IP witnesses, and which is confirmed by forensic examination of data. This combination of corroborating and analytical evidence of stored urine samples allows the IP to conclude beyond a reasonable doubt that this was the *modus operandi* of State directed oversight and control of the Moscow Laboratory anti-doping operational system.

3.1 The IC Findings on the Moscow Laboratory

The IC Report of 09 November 2015 describes the then accredited Moscow accredited laboratory and its operation. This Report will not reiterate its contents. Suffice it to say, the IC found many irregularities and problems and recommended to WADA that the laboratory be declared non-compliant with the World Anti-Doping Code (the “Code”). That recommendation was immediately accepted by WADA. The operations of the Moscow Laboratory were suspended as of 10 November 2015 and have lost their accreditation as of 15 April 2016. The suspension was confirmed at the WADA Foundation Board meetings in Colorado Springs the following week.

The IC Report identified issues of “... *grave concern in regard to integrity, corruption, handling of testing analysis, process of samples and in a separate matter, the deliberate destruction of a large number of samples prior to a WADA onsite audit in December of 2014*” (p.193).

Given the evidence available to the IC at the time, it suggested that it was the laboratory personnel who were at the center of the cover up of positive doping samples and related matters. The IC Report recognized that the MofS had a conflict of interest that affected the independence and objectivity required for the successful operation of the Moscow Laboratory.

A brief account of Russian State interest and influence over the Moscow Laboratory was also included in the IC Report. It concluded that regular weekly meetings occurred between the FSB officer Evgeny Blokhin (“FSB Blokhin”) and Dr. Rodchenkov. The IC did not report on: the State oversight of the Moscow Laboratory in the form of FSB insertion into the laboratory, the Russian Ministry of Sport (“MofS”) involvement in the operations of the Moscow Laboratory, nor its relationships with any other State organizations.

The IP investigation has had the ability to assess substantial digital evidence retrieved from various hard drives and other sources, documentary and *viva voce* evidence that were not available to the IC. The IP has also had the benefit of significant analytical examination of stored urine samples. From all of the foregoing evidentiary sources, the IP concludes that the Moscow Laboratory was not staffed with personnel who behaved in a rogue fashion for their own financial gain. Quite to the contrary, the laboratory personnel were not permitted to act independently of any instructions that were funneled down to them from the MofS.

The Moscow Laboratory was effectively caught up in the jaws of a vice. It was a key player in the successful operation of a State imposed and rigorously controlled program, which was overall managed and dictated by the MofS. The laboratory was the vital cog in a much larger machine that was State run and

developed and whose other primary participants included the MofS, Russian Anti Doping Agency (“RUSADA”), the Center of Sports Preparation of National Teams of Russia (“CSP”), and the Federal Security Service (“FSB”). The Moscow Laboratory personnel acted as they did because, as the witnesses expressed, if they did not, they would no longer be employed there.

It can be made to appear that the laboratory was acting alone. However, given the examination and the insights obtained from evidence available to the IP investigation, it is correct to place the Moscow Laboratory within the ambit of State control. It was the vital mechanism that enabled athletes to compete while using performance enhancing drugs (“PED”s). It appears that the system was designed so that if its actions were revealed, the Moscow Laboratory could be jettisoned without damaging or revealing other parts of the drug cheating program. In the case of discovery, the jaws of the vice would close and any convenient explanation blaming the Moscow Laboratory would operate to cover up the rest of the State run system.

3.1.1 IP Findings

1. The Moscow Laboratory operated under State directed oversight and control of its anti-doping operational system.

2. The Moscow Laboratory personnel were required to be part of the State directed system that enabled Russian athletes to compete while engaged in the use of doping substances.

3. The Moscow Laboratory personnel did not have a choice in whether to be involved in the State directed system.

3.2 The Disappearing Positive Methodology

The Disappearing Positive Methodology, as described below, was the failsafe, final fall back system developed by the MofS in combination with the Moscow Laboratory. This methodology ensured that if any doped, elite performing athlete was not protected by the various operational mechanisms in place during the sample collection and transport process (discussed in the IC Report), their doping would be covered up at the Laboratory stage. They would be protected by the Laboratory's analytical work using the Disappearing Positive Methodology. Dr. Rodchenkov and the witnesses described the system to the IP in witness interviews. The IP investigative team has reviewed and date-validated hundreds of email communications; digital media communications, along with forensic analytical findings and experiments and can demonstrate the existence of this system beyond a reasonable doubt.

3.2.1 The Steps in the Disappearing Positive Methodology

When a Russian athlete's sample was analyzed by the Moscow Laboratory the following occurred.

An initial analytical screen would be conducted. If the first analytical screen revealed a likely Adverse Analytical Finding ("AAF") on the athlete's A sample, the bench work in the laboratory was halted. The sample bottle number, the date of collection, the sex of the athlete, the sport discipline and event were recorded (the "Athlete Profile").

The initial Athlete Profile was communicated to a Liaison person. The communication by laboratory personnel to the Liaison Person is by email, telephone, orally in person or by other digital media communication methods. At this point the laboratory does not know the identity of the athlete that it reported to the Liaison person.

The IP investigation identified 3 participants who have acted as a Liaison person in this scheme as early as 2012. Natalia Zhelanova, the current advisor to Russian Minister of Sport Vitaly Mutko ("Minister Mutko") on all matters related to anti-doping, was the Liaison person from approximately 2012-2013 and

Alexey Velikodniy³, employed by the CSP from 2013 through to 2015 until the loss of accreditation of the Moscow Laboratory. For a brief period in late 2013 a third Liaison person, Dr. Avak Abalyan, currently the Deputy Director of the Department of Education and Science fulfilled this role.

The IP investigative staff has analysed and confirmed that communication from these individuals originated from private email accounts. The IP is aware of at least 2 occasions where Zhelanova used her official MofS @minsport.gov.ru email account to communicate information related to a urine sample to and from the Laboratory.

According to Dr. Rodchenkov, the Liaison process was endorsed by the Russian Deputy Minister of Sport Yury Nagornykh (“Deputy Minister Nagornykh”) after he took office. The Deputy Minister gave instructions to Dr. Rodchenkov to convey all positive screen results to Zhelanova and she would then report to Deputy Minister Nagornykh.

Once the Liaison person received the Athlete Profile, he or she proceeded to obtain the identity of the athlete through contacting RUSADA and by providing the bottle number of the identified urine sample. RUSADA obtained the identity

³ The CSP is based in a separate building to the Ministry of Sport. Nevertheless, according to Rodchenkov Velikodniy had his office three doors away from the office of Deputy Minister Nagornykh.

of the athlete through the athlete's DCF and communicated the information to the Liaison person.

The Liaison person then transmitted the full Athlete Profile to Deputy Minister Nagornykh. After making inquiries to the sports authorities and coaches regarding the specific athlete, Deputy Minister Nagornykh would issue an order for that sample. His order was either one of 2 code words: SAVE or QUARANTINE.⁴

The SAVE or QUARANTINE order attached to the full Athlete Profile, which now included the athlete's identity, was funneled back to the Moscow Laboratory through the Liaison Person.

The Laboratory would then process the sample depending on the order given. If the order was SAVE, the Laboratory took no further steps in the analytical bench work process of that sample. The sample was subsequently reported as negative in ADAMS. The Laboratory personnel would manipulate the Laboratory's non-auditable version of their Laboratory Information Management System (LIMS) so that it reflected a negative analysis. After the manipulation of the system, anyone reviewing the LIMS or ADAMS systems would not know it was a false entry.

⁴ While the term save (сохранить) or quarantine (карантин) were mainly used, on one occasion the IP investigation staff saw documentary use of the question "execute or pardon" in relation to the referral of positive samples.

If the order was QUARANTINE, the Laboratory would proceed to complete the analytical bench work in accordance with the procedure governed by the International Standard for Laboratories (“ISL”).

Not every athlete “quarantined,” however, was necessarily subject to the reporting of an AAF. Further examination may have revealed that there was not sufficient conclusive analytical evidence or that the individual had a Therapeutic Use Exemption (“TUE”).

What is evident from this process is that the Moscow Laboratory was carrying out the order given to it by the Deputy Minister of Sport. Every initial analytical screen revealing a likely AAF was communicated up the chain of command via the Liaison person. Laboratory staff was under instruction to report all positive screen results to the MofS, whatever the circumstances. They had no choice. It is for this reason that the IP has determined that the Laboratory was merely a cog in a State run machine, and not the rogue body of individuals that has alleged.

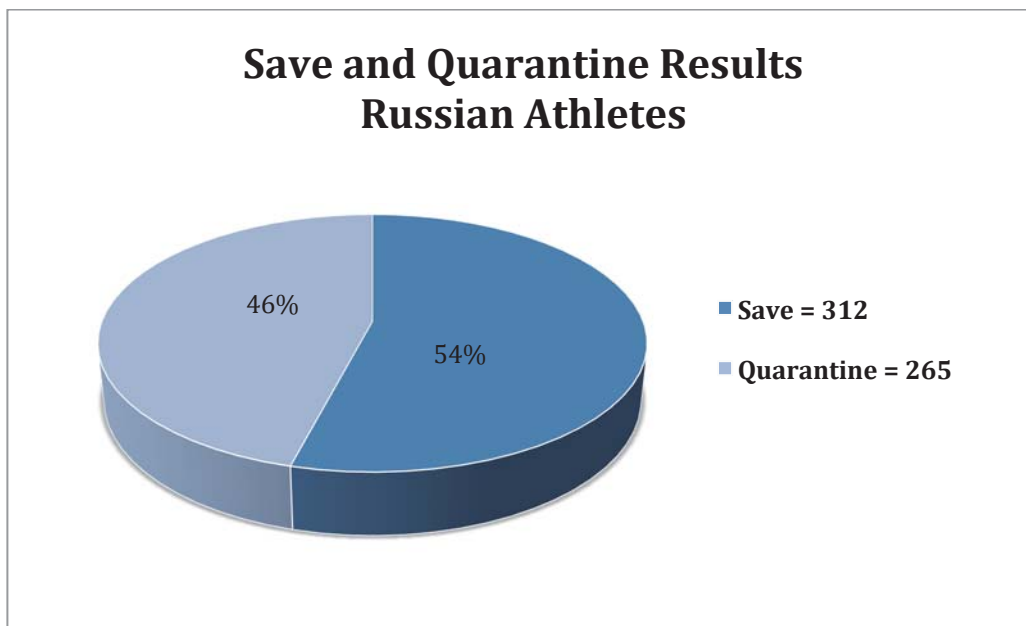
3.2.2 Investigative Results Concerning the Disappearing Positive Methodology

The Disappearing Positive Methodology was identified as operating over the period from at least late 2011 to August 2015. It affected athletes from all sport

disciplines whose urine samples were being analysed by the Moscow Laboratory. According to the IP witnesses, athletes that were ordered SAVE tended to be medal winners or athletes of promise. Foreign athletes, or Russian athletes deemed unpromising, were ordered QUARANTINE by the MofS and their Laboratory bench work was completed using the regular laboratory analytical process.

A total of 643 positive screen Athlete Profile reports were reviewed and catalogued by the IP into a database. From that database, the IP was able to develop certain statistics that explain the overall results of the Disappearing Positive Methodology.

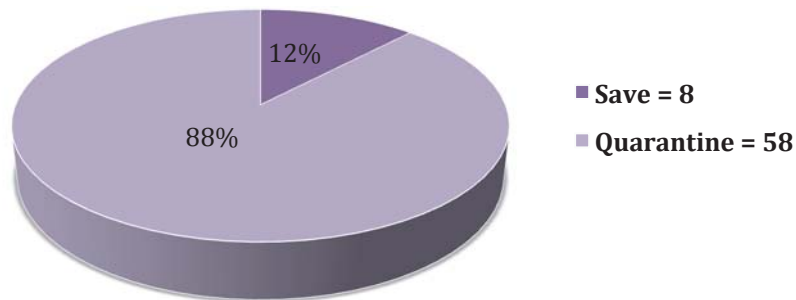
For example, the statistics show that the MofS made SAVE or QUARANTINE orders on 577 Athlete Profiles resulting in over 50 percent distribution of SAVES for Russian athletes.



Through the IP's review of the communication exchanged between Liaison person Velikodniy and the Laboratory, a common pattern emerged where nearly all foreigners were ordered QUARANTINE. Here is an excerpt from recovered digital communication during the 2013 Moscow Championships: *"All foreigners – quarantine!"* and during another event *"Foreigners – Quarantine."*

The statistical analysis of the Athlete Profile database confirms that 88 percent of foreign athletes were ordered QUARANTINE, resulting in processing of their urine sample in accordance with the ISL.

Save and Quarantine Results Foreign Athletes

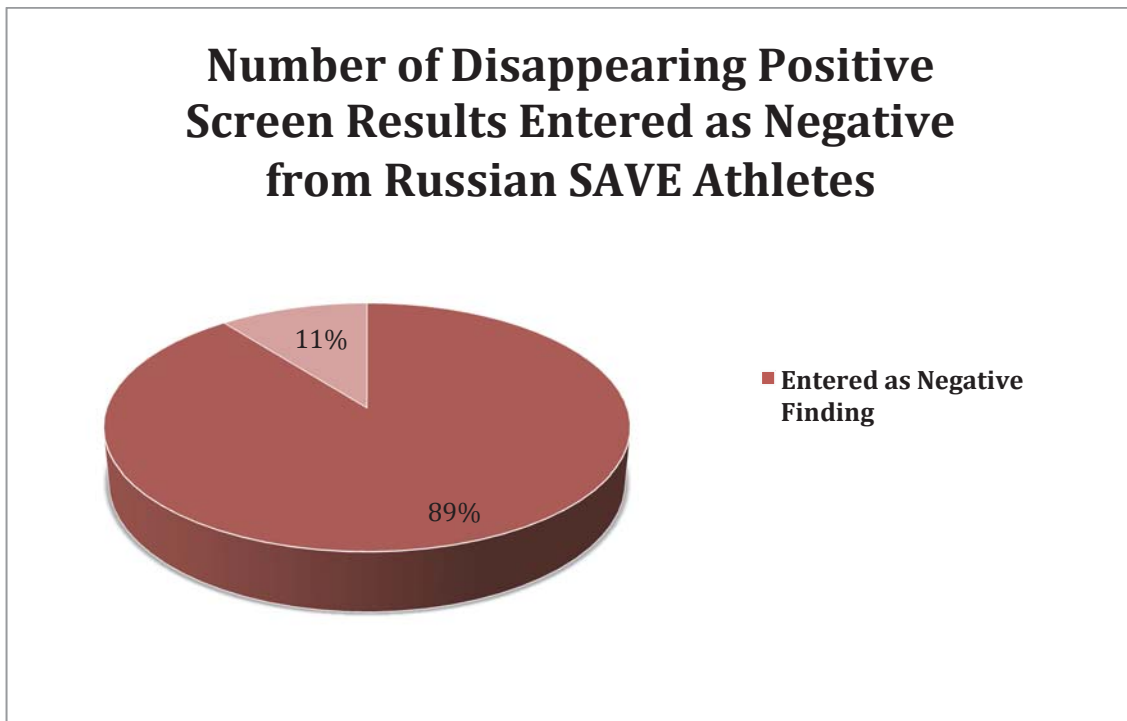


Through this analysis an anomaly was discovered in the Disappearing Positive Methodology where on at least 1 occasions, there is a change in the chain of command. The IP is aware of at least 1 foreign footballer playing in the Russian League had that benefit of a SAVE order. That SAVE decision was made by Minister Mutko and not Deputy Minister Nagornykh.

Email evidence available to the IP shows that the SAVE decision for the football players was the final decision of "VL." VL is the first name and patronymic name initials of the Minister of Sport, Vitaly Leontiyevich Mutko, who is also the President of the Russian Football Federation.

The IP investigative team has been able to follow many examples of communication chains advising of the initial positive screen results. The Athlete

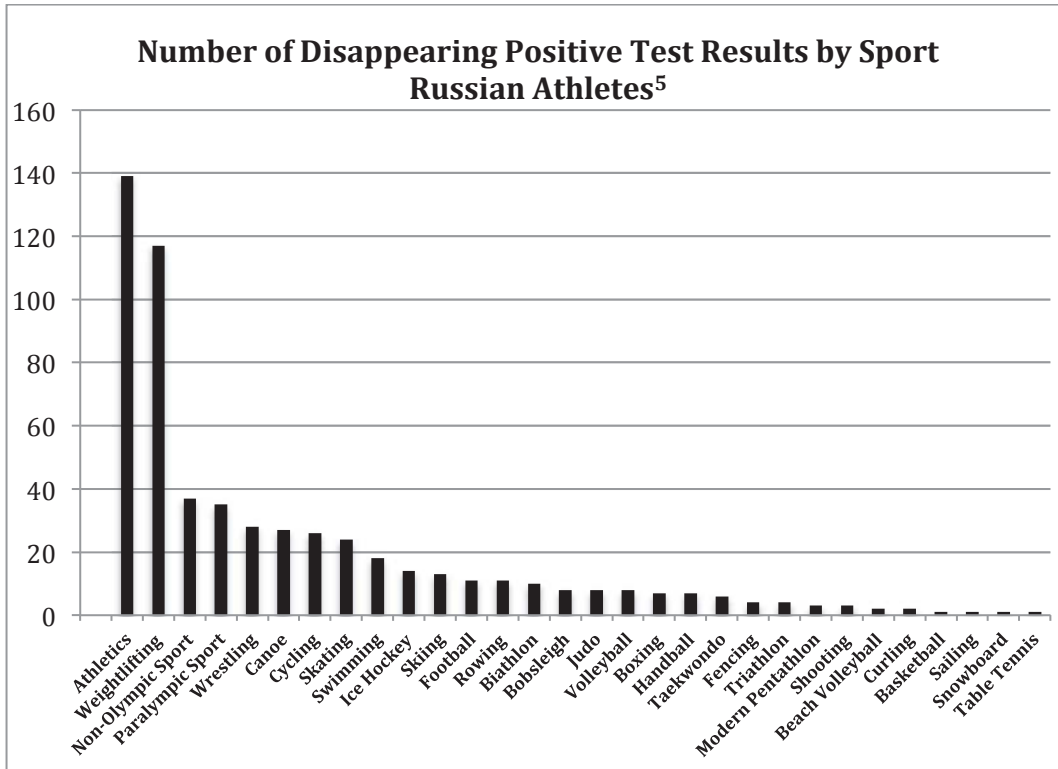
Profile is communicated to the Liaison person for athlete identification, then onto Deputy Minister Nagornykh for a SAVE or QUARANTINE order. An order is issued to the Moscow Laboratory. Using the information available in these communication chains, the IP conducted a cross check with the information available in ADAMS. The ADAMS results in the majority of cases show that the sample was recorded as a “negative finding.” A total of 89% of positive test results have been entered as negative findings.



In total, over the period 2012-2015, the IP found the Disappearing Positive Methodology used on 643 positive samples. The charts detail the findings. Given that it was impossible for the IP to achieve full access to Russian records or the LIMS system, this number is only a minimum.

The participants in the Disappearing Positive Methodology were so confident in the inability of outsiders to detect what was going on, that the methodology operated even during the time of the IC in 2015. Although it did appear to slow down, Dr. Rodchenkov indicated that in 2015 the Deputy Minister had wanted to close the whole system down as he thought it was too risky, but was persuaded to keep it going by Rodionova. Throughout the period beginning in late 2011 the methodology operated efficiently and effectively, undisturbed by foreign observers.

The Disappearing Positive Methodology was utilised across a range of sports as reflected in the following chart.



3.2.3 IP Findings

1. The Moscow Laboratory was the final failsafe protective shield in the State directed doping regime.

2. The Ministry of Sport made the determination as to which athletes would be protected by the Disappearing Positive Methodology.

⁵ Athletics- 139, Weightlifting- 117, Non-Olympic Sports- 37, Paralympic Sport-35, Wrestling-28, Canoe- 27, Cycling-26, Skating-24, Swimming- 18, Ice Hockey -14, Skiing- 13, Football, Rowing- both 11, Biathlon-10, Bobsleigh, Judo, Volleyball- each 8, Boxing, Handball - both 7, Taekwondo-6, Fencing, Triathlon- both 4, Modern Pentathlon, Shooting- both 3, Beach Volleyball, Curling- both 2, Basketball, Sailing, Snowboard, Table Tennis, Water Polo- each 1

3. The Deputy Minister of Sport in his discretion made the save or quarantine order.
4. The Disappearing Positive Methodology was planned and operated over a period from at least late 2011 until August 2015.
5. Russian athletes from the vast majority of summer and winter Olympic sports benefited from the Disappearing Positive Methodology.

3.3 Events of Autumn 2014 and the 37 Samples

Further evidence of the Disappearing Positive Methodology was discovered through the IP's investigation into samples taken during the second half of 2014. On 07 December 2014, WADA wrote to Dr. Rodchenkov to advise him of a surprise inspection of the Moscow Laboratory. It was communicated to him that this visit would also involve removing samples held by the Laboratory and that he was to secure the stored samples in advance of WADA's arrival.

Dr. Rodchenkov has acknowledged in interviews that WADA's visit caused significant anxiety at both the Laboratory and MofS because of the large quantity of positive but reported as negatives samples stored at the Laboratory. This was reported in detail by the IC. While these samples had been covered up using the Disappearing Positive Methodology, the fear was that if retests were conducted

on them, the samples would retest positive and would expose the system. The IC has reported on how, in advance of the WADA visit, Dr. Rodchenkov destroyed 1417 samples analysed more than 90 days before 10 September 2016. As a result of the IP investigation the reason for doing so is now known.

Dr. Rodchenkov explained to the IP that even with the destruction of the old samples, the Laboratory was still at risk of being discovered and exposed. Of the remaining samples not destroyed by the Laboratory, 37 were positive samples for which a negative report had been made in ADAMS following the Disappearing Positive Methodology. These were the samples that were going to be collected by WADA.

Dr. Rodchenkov took this problem to Deputy Minister Nagornykh. They met the evening of 12 December 2014 at the MofS offices, prior to the WADA visit on 17 December 2014. It was decided that the reported results on some of the samples could be explained. As to the remaining samples, Dr. Rodchenkov recalls that Deputy Minister Nagornykh stated that he would arrange for the “magicians” to come. Dr. Rodchenkov understood that Deputy Minister Nagornykh was referring to the FSB as the “magicians”.

Later that evening of 12 December 2014, FSB Blokhin, the FSB agent monitoring the activities within the Laboratory (See IC Report) arranged for other FSB agents

to enter the Laboratory. No Laboratory staff witnessed the FSB's presence in the Laboratory, however the next morning the caps of the remaining samples were opened so that the urine in them could be swapped.

According to Dr. Rodchenkov, there was not enough time to find clean urine from the remaining athletes to substitute for the positive samples. Instead, his staff had to find clean urine previously provided by other athletes that adequately matched the profile of the positive samples. He stated that in the limited period of time they had to substitute the positive samples, they used any clean athletes' urine which they could find stored in the Laboratory. Dr. Rodchenkov and laboratory staff then adjusted the clean urine with salt, diluted it with water and/or adjusted the creatinine levels to match the original profile as much as possible. He also stated that 2 athletes' urine may be in the same bottle. After the swapping had been accomplished the caps were then screwed back onto the bottles securing the replaced urine.

After WADA officials arrived at the Moscow Laboratory, they removed all of the samples, post 10 September 2014, and had them transported to the WADA accredited Laboratory in Lausanne, Switzerland.

3.4 Forensic Testing of the 37 Samples

Dr. Rodchenkov has provided a schedule of the 37 samples described above to the IP. The IP has checked the authenticity of the schedule and is satisfied that it is a contemporaneous document. The sample numbers have also been cross-checked against digital communications in the IP's possession. The IP investigation found a 28 of the 37 of the total samples in the database under the IP's control were directly related to SAVE orders from Liaison person Velikodniy. A review the IP conducted in ADAMS found that all were reported as negative findings. This corroborates Dr. Rodchenkov's evidence that the 37 samples were covered up with the sample swapping methodology discussed in Chapter 5 in connection with the Sochi Games.

The IP investigative staff arranged for a forensic examination of the samples, of which a total of 26 were found in the Lausanne laboratory and transported under secure chain of custody conditions to London, UK at the Kings College Doping Control Centre ("DCC").

The 26 Moscow B bottles were examined by a "scratches and marks" expert with over 20 years' experience engaged by a highly respected international testing organisation. This involved microscopic examination of B bottles from the Moscow Laboratory. The expert was also requested to establish whether caps could be removed from sealed bottles without apparent signs of tampering.

Further analytical tests on the related A bottle contents were undertaken by the DCC for DNA, salt content, creatinine and steroid profile. As previously noted, Dr. Rodchenkov's evidence was that salt was sometimes added to the clean replacement urine where necessary to raise the SG of the sample to be consistent with the SG reported on the initial DCF.

The IP was presented with compelling evidence from this forensic and analytical examination which corroborates important parts of Dr. Rodchenkov's evidence as follows:

1. The scratches and marks expert advised that he was able to remove the cap from a sealed bottle leaving some minor scratches and marks that were not visible to the untrained eye, but which could be clearly seen under microscopic examination. The IP was given a graphic personal demonstration of the work of the expert.
2. The expert was asked to examine half of the batch of 26 sample bottles. Included in the 13 for testing was one of the bottles that Dr. Rodchenkov advised had not been opened. The expert was not told the number of the non-opened bottle.

3. The examination revealed that under microscopic examination of the 13 bottles, 12 showed scratches and marks on the inner side of the cap consistent with trying to remove the cap. These scratches and marks correlated with the expert's own successful attempts to remove bottle caps. A signed statement has been obtained. This evidence corroborates Dr. Rodchenkov's testimony to the IP.
4. The 13th bottle was examined by the expert at random amongst the batch and was found not to have any scratches and marks. In the expert's opinion it had not been opened. This further corroborates Dr. Rodchenkov's evidence to the IP.
5. A urine examination was carried out by the DCC on all bottles.
6. It was found that urine samples of an athlete who had competed at Sochi did not DNA match with the sample given by him in the batch of 26 samples. The B bottle of this athlete had been examined in the batch of 12 and was found to have been tampered with. This combination of a DNA mismatch and tampering further corroborates Dr. Rodchenkov's evidence that the urine in that sample had been replaced with clean urine from another person.

7. The batch of 26 samples contained two samples purportedly from the same athlete. Both of those B sample bottles showed signs of tampering. In a comparison of DNA it was found that the two samples did not match - in other words, they came from different people.

8. DNA evidence of a female athlete who had previously won a Gold and Silver medal showed that the urine in her sample had come from two different people, both female. Again her B bottle showed signs of tampering in the consistent places inside the cap. This corroborates Dr. Rodchenkov's evidence that in some cases, the clean urine substituted into these bottles came from more than one clean stored sample.

Of the 12 bottles found to have been tampered with, based on scratches and marks found on the caps, the following sports were involved: Athletics 4, Wrestling 2, Weightlifting 2, Taekwondo 1, Skating 1, Sailing 1, and Judo 1. The names of the athletes involved are being withheld by the IP at this stage for consideration of further results management proceedings.

3.4.1 IP Findings

1. Sample bottles stored in the Moscow Laboratory from 10 September to 10 December 2014 were tampered with by having their urine swapped.
2. The DNA analysis confirmed 3 samples where the DNA did not match that of the athlete.

3.5 The “Cocktail”

The IC reported on the older model of distribution of doping substances under the discerning eye of Dr. Portugalov and the coaches with whom he worked. Dr. Rodchenkov in interviews with the IP testified that, prior to 2010, doping advice to Russian athletes came primarily from their coaches. Dr. Rodchenkov observed that the quality of steroids and other PEDs that the coaches were providing to their athletes was becoming suspect and that the scientific knowledge regarding detection windows of various PEDs was not being used effectively.

After he became laboratory director, and in furtherance of his responsibility to improve Russian sport performance by covering up doping, Dr. Rodchenkov developed a steroid cocktail optimized to avoid detection. Initially, that cocktail consisted of Oral Turinabol (Dehydrochloromethyl-testosterone), Oxandrolone and Methasterone. The steroids were dissolved in alcohol (Chivas for the men

and Vermouth for the women). The solution was then swished in the mouth in order to be absorbed by the bucal membrane and then spit out. Dr. Rodchenkov's research indicated that, with the laboratory technology available at the time, the detection window for the steroids in the cocktail would not exceed 3-5 days.

After the London Games, the steroid Oral Turinabol was replaced in the cocktail with the steroid Trenbolone because long term metabolites of Oral Turinabol had become more easily detected.

While Dr. Rodchenkov's "cocktail" may sound fanciful, the IP has confirmed with its scientific advisor that indeed steroids dissolve better in alcohol than in water, and that the administration of steroids through bucal absorption, as compared to injection or swallowing the drug, does shorten the window of detectability.

Dr. Rodchenkov's evidence is that, although he designed the cocktail, he did not make it or distribute it. Rather, the cocktail was distributed to various sport federations by Irina Rodionova, who worked for the CSP, a subsidiary organization of the MofS. Rodionova nicknamed the cocktail "Duchess" after a traditional Russian drink.

Dr. Rodchenkov's evidence is that by the time of the Olympic Games in London, many of Russia's top athletes were using the cocktail. This is corroborated by the fact that in recent retesting of the London samples by the IOC. Samples of 8 Russian athletes were found to contain metabolites of Oral Turinabol.

Chapter 4: The Command Structure

4.1 The Ministry of Sport of the Russian Federation

According to its website, the Ministry of Sport of the Russian Federation is a federal executive body responsible for the development and implementation of State policy and normative legal regulations in the sphere of physical culture and sports. The MofS also manages the prevention of doping in sport and State property in the sphere of physical culture and sports.⁶

It operates directly and through subordinate organizations in collaboration with other federal executive bodies, executive bodies of subjects of the Russian Federation, local authorities, public associations and other organizations.⁷ One example of its operation through a subordinate body is the Russian Federal Research Center of Physical Culture and Sports (VNIIFK) dealing with medical issues in sport. (See chapter 15 of the IC report and as to the individual see the IC report generally).

In the IP investigation another subordinate organisation was instrumental in the mosaic of State involvement. The CSP played a routine and regular role in the

⁶ Ministry of Sport of the Russian Federation, 2015. [Online] Available at: <http://www.minsport.gov.ru/en/> [Accessed 15 July 2016].

⁷ *Ibid.*

disappearing positive methodology and in the sample swapping at Sochi. The first Liaison person for the Disappearing Positive Methodology Natalia Zhenalova was with the MofS. The other liaison person for the disappearing positive methodology, Alexey Velikodniy, was at the time of performing that role working for the CSP. The CSP Deputy Director, Irina Rodionova, oversaw the collection of clean urine samples in 2013 for storage in the CSP offices and subsequent shipment to the FSB building near the Sochi Laboratory. The interweaving of subordinate personnel into the MofS is best illustrated by Dr. Rodchenkov's evidence that Velikodniy who, while working as the CSP Liaison person, had an office in the MofS three doors away from the Deputy Minister Nagornykh.

The MofS is governed by the Constitution of the Russian Federation, federal constitutional laws, federal laws, acts of the President of the Russian Federation and the Government of the Russian Federation, international treaties of the Russian Federation and the 2012 resolution of the Government of the Russian Federation officially re-establishing the Ministry.⁸

The Minister of Sport is Vitaly Mutko. Natalia Zhelanova is an advisor to the Minister of Sport and was formerly the person in charge of Anti-Doping within

⁸ *Ibid.*

the MofS. At an earlier stage in her career she was the liaison person involved in the Disappearing Positive Methodology. Deputy Minister Nagornykh is the person who determined which positive samples reported by the Liaison person would be saved or quarantined.

The involvement of Deputy Minister Nagornykh and Zhelanova in the doping cover up scheme has been well described in other parts of this Report. Dr. Rodchenkov's evidence is that, in several of his regular meetings with Deputy Minister Nagornykh to discuss the cover up scheme, Deputy Minister Nagornykh told him that Minister of Sport Mutko was aware of everything that they were discussing. Dr. Rodchenkov's evidence is that it is inconceivable that Minister Mutko was not aware of the doping cover up scheme.

The IP has reviewed several documents which tend to corroborate Dr. Rodchenkov's conclusion. These include a report, which Dr. Rodchenkov says he prepared at the request of his FSB handler in January 2015 in response to the ARD documentary on Russian doping. The metadata analysis by the IP confirm that this document was created in January by Dr. Rodchenkov while he was still Director of the Moscow Laboratory. That report starts out "Athletics was always on doping program." It concludes by saying "The same situation is uncontrollable in weightlifting... The use of anabolic steroids is almost year around..."

The report explains that, because of new testing technology, if Russian samples from the 2012 London Games, the Beijing Games or various World Championships were to be retested, two dozen or more Russian athletes from athletics and weightlifting would be disqualified. This report makes clear that as of January 2015 the problem of doping in Russian athletics was ongoing: "In athletics, from youth to veterans Intense and uninventive doping is still going, and neither athletes nor coaches know how to prepare without it..." Dr. Rodchenkov's evidence is that this report found its way to Minister Mutko through FSB channels and that he was called in by Minister Mutko to explain it.

A second document viewed by the IP is an advanced list of athletes going to the Sochi Games who were to be protected against testing positive. The IP examination in this document establishes that it was prepared on Velikodniy's computer before the Sochi Games. Dr. Rodchenkov's evidence is that Velikodniy told him that this document was prepared to impress Minister Mutko. Selected excerpts from Dr. Rodchenkov's diary reflect several meetings with Minister Mutko in the month prior to and during Sochi Games. Dr. Rodchenkov's evidence is that the doping cover up plan for Sochi was discussed at those meetings.

Finally, reference is made to the IC Report in which Minister Mutko's role in the scandal and bribery attempt involving the IAAF and Russian racewalkers was more fully discussed. Dr. Rodchenkov's evidence is that in September 2012, he met with Minister Mutko to discuss the IAAF's extortion demand. At that meeting, Minister Mutko asked Dr. Rodchenkov whether the situation was really so bad that he needed to pay all of that money, thereby exposing his knowledge of the doping problem in Russian Athletics.

On paper it appears that the Moscow Laboratory is wholly independent from the MofS. The IP investigation establishes the actual operational interference and control in the Moscow Laboratory by the MofS. See the description of the operations of the Moscow Laboratory in Chapter 3.

4.2 The Federal Security Service of the Russian Federation (FSB)

The FSB is the successor of the KGB and has responsibility for all security operations at home and abroad. There is a paucity of public information in regard to the workings of the FSB. In the time the IP had to investigate this aspect of its mandate it was not possible to fully determine the role of the FSB in sport and doping. The IP has only gained a glimpse into the FSB's operations.

The IP investigation has identified a role played by FSB Blokhin and two other unidentified persons from the FSB in the operations of both the Moscow and the Sochi laboratories. The FSB role is not interference and control, like that of the Deputy Minister of Sport, but assistance in arranging and operating the State sponsored system of sample swapping that occurred in connection with: the 2013 University Games and IAAF Championships, the Sochi laboratory and in the lead up to the WADA seizure of samples in December 2014. Dr. Rodchenkov was stitched into the FSB structure in furtherance of the FSB assistance to the laboratories. Dr. Rodchenkov informed the IP during a face to face interview that when he became the Director of the Moscow Laboratory he signed a document which made him an FSB agent code name "KUTS". He was responsible for reporting everything to his FSB superior from which the reporting would go up the chain of command to an FSB General.

The FSB agent who most regularly visited the Moscow Laboratory was Officer Blokhin. FSB Blokhin was under a different FSB chain of command structure than Dr. Rodchenkov. Dr. Rodchenkov's evidence is that FSB Blokhin was very involved in collecting sample bottles and caps of bottles from the Moscow laboratory. This was all part of the FSB's work to develop a methodology for removing the caps on urine sample bottles described in Chapter 5.

Chapter 5 details the FSB's involvement in the Sochi Games including the FSB's role in removing bottle caps and providing clean urine for sample swapping during the Sochi Games. In addition, the FSB had an operations room and a sleeping room on the 4th floor of the Sochi Laboratory and FSB Blokhin had access to the Laboratory as an accredited persons under the cover of being a sewage and plumbing employee of the building service maintenance contractor, Bilfinger.

The IP has reliable evidence that FSB Blokhin was seen by IP witnesses entering the Sochi laboratory when others were leaving for the evening and from time to time he was seen in a Bilfinger uniform in and around the laboratory. FSB Blokhin was identified in his undercover role as a Bilfinger employee on the list of individuals who were given access to the laboratory. The IP has reviewed this document. Dr. Rodchenkov has also provided the IP with a picture of FSB Blokhin and several other individuals in Dr. Rodchenkov's office in the Sochi Laboratory. Dr. Rodchenkov's evidence also notes that Thierry Boghossian, a WADA Science Department employee and member of the Independent Observer Team, was put under FSB surveillance to make sure that if he visited the Laboratory in the middle of the night individuals involved in swapping samples would be forewarned. Dr. Rodchenkov has also described meeting with more senior FSB officials immediately before and during the Sochi Games where the doping plan was discussed.

Dr. Rodchenkov's evidence is also that there was an FSB agent in each Sochi doping control station responsible for sending the DCFs for protected Russian athletes to Irina Rodionova to be forwarded to Dr. Rodchenkov or his secretary to ensure that the correct samples were swapped.

While the IP has not found communications between FSB Blokhin and his superiors in the FSB chain of command, that is not surprising given that the FSB is a secret service organization. Were FSB Blokhin's actions approved at the highest level of the FSB and the State? The IP cannot say. Similar questions of accountability were asked in the United Kingdom by "The Litvinenko Inquiry" chaired by Sir Robert Owen whose report was published in January 2016.⁹ The Inquiry received expert evidence from Professor Robert Service on the nature of the Russian State.¹⁰ He emphasised the paucity of public information relating to the inner workings of the FSB being the successor of the KGB. Professor Service notes in paragraph 36 of his evidence:

"While all academics, media commentators and reporters make much of Putin's earlier careers in the KGB and the FSB, there have appeared no

⁹ Owen, R., 2016. 'The Litvinenko Inquiry' – Report into the death of Alexander Litvinenko.' [Online] Available at: <https://www.litvinenkoinquiry.org/files/Litvinenko-Inquiry-Report-web-version.pdf> [Accessed 21 January 2016].

¹⁰ Service, R., 2015. 'Expert evidence on modern Russian history – Report for the Litvinenko Inquiry.' [Online] Available at: <https://www.litvinenkoinquiry.org/files/INQ019146x.pdf> [Accessed 16 July 2016].

substantial revelations about his routine of working relations with the intelligence agencies since the start of his first Presidential term. The usual assumption is that he keeps a close eye on their activities and gives them strategic guidance. But the exact extent of his oversight of active operations is veiled in secrecy. It is one of those matters that no one has yet managed to uncover."

The picture that emerges from all of the foregoing is an intertwined network of State involvement through the MofS and the FSB in the operations of both the Moscow and Sochi Laboratories. The FSB was woven into the fabric of the Laboratory operations and the MofS was directing the operational results of the Laboratories.

Chapter 5: The Sochi Laboratory Sample Swapping Methodology

5.1 Introduction

The State control of and interference in the doping control process at the Moscow Laboratory was not an option at the Sochi Laboratory. Given the presence of international personnel from around the world, it was impossible to manipulate the results of the initial analytical work using the Disappearing Positive Methodology of the Moscow Laboratory. Therefore, a new process had to be developed to ensure that doped Russian athletes could continue to participate in the Sochi Games without their dirty samples being detected by the international personnel present in the Laboratory. A completely new system was designed. It was **unique** to Sochi and does not depend upon the Disappearing Positive Methodology in use at the Moscow Laboratory.

The IP has strong evidence that verifies and corroborates a substantial part of *The New York Times* article which exposed the Sochi system. The IP has in its possession the reports from experiments it conducted, forensic work, laboratory sample analysis, documentary and *viva voce* interview evidence, which supports the existence of the sample swapping methodology at Sochi.

The scheme that was used in the Sochi Laboratory involved opening Russian athletes' sample bottles and swapping out dirty urine with clean urine. The clandestine swapping process would be carried out throughout the night when there were normally no international personnel present. By the morning clean urine samples from the night's activity would be waiting in the aliquoting room ready to be analyzed by the laboratory's day shift personnel where they would result in negative findings.

Specific athletes were identified and placed on a State Programme list for protection of samples given during the Sochi Games. Athletes on this list would have the urine in their Sochi samples replaced with any clean urine supplied by them in advance of the Sochi Games which was stored in the freezer of the FSB building near the Sochi Laboratory. So long as the swap occurred, the athlete would be protected from a positive test for any PEDs they were taking.

The Report has already referred to the doping program using the athlete cocktail developed by Dr. Rodchenkov. According to Dr. Rodchenkov athletes were competing "dirty" at Sochi using this cocktail.

5.2 Planning for Sochi

The preparation for Sochi began years in advance, when the IOC in 2007 awarded Russia the Sochi Games. However, the real catalyst to develop the

Sochi scheme was the abysmal performance of the Russian delegation at the Vancouver Winter Games in 2010. According to Dr. Rodchenkov, it was decided that this could not happen at Sochi and the plan to ensure lots of medal winners was concocted by Minister Mutko, Deputy Minister Nagornykh and Deputy Director of the CSP, Irina Rodionova. The plan to protect dirty athletes was threefold: (i) develop a “undetectable” pharmacological programme to administer to athletes identified to go on the programme, (ii) State control of all parts of the anti-doping program, and (iii) State support by means of FSB assistance. Deputy Minister Nagornykh held the chief responsibility of the execution of the Sochi plan. Although he directly reported to Minister Mutko, he was in charge of the Sochi plan and received assistance from Rodionova.

All State resources were used, including the FSB to assist in the execution of the plan. Early architectural drawings of the Sochi Laboratory show just how important the FSB were to the execution of the plan as they had their own dedicated rooms within the Laboratory building. Indeed it was the FSB who performed the critical role of opening the B sample bottles using what they thought was their undetectable method. The IP has evidence that the FSB had methodology to open sample bottles existed in the Moscow Laboratory as early as February 2013. Thus, while the Sochi bottles could be opened, the problem of actually getting them opened in a laboratory full of international observers and personnel remained.

The quaint solution of passing dirty samples through a mouse hole drilled between the aliquoting room in the secure area of the laboratory and the adjacent “operations” room on the exterior of the secure area was suggested by Dr. Rodchenkov’s second in command, Yuri Chizov. This scheme was approved by Deputy Minister Nagornykh and Chizhov and FSB Blokhin travelled on their own to Sochi to arrange the drilling of the mouse hole. With the plan’s linchpin in place, the hijacking of the Sochi Games could go on unobstructed by international observers and any interference.

It was reported by *The New York Times* that there was significance to the FSB building being based next to the anti-doping laboratory at Sochi. However examination of Dr. Rodchenkov’s hard drive showed the presence of an FSB office within the anti-doping laboratory, on the fourth floor close to Dr. Rodchenkov’s office. Witnesses confirm this office was used by FSB Blokhin.



Numbers 1-6 were added to this floor plan by the IP.

5.2.1 IP Findings

1. The planning for the unique Sochi Laboratory sample swapping involved the Ministry of Sport, FSB, CSP, and the Moscow Laboratory.

5.2.2 The State Programme

Dr. Rodchenkov provided to the IP an Excel spreadsheet with a list of 37 athletes of various winter sport disciplines competing at Sochi. He stated that these athletes were Olympic medal hopefuls and under the protection of the “State Programme,” meaning that their athletic preparation was under full control of the State. This control included providing athletes with PEDs through the cocktail developed by Dr. Rodchenkov, concealment of any positive results by

the laboratory, and having a bank of previously provided clean urine available for swapping. Rodionova had arranged for the clean urine to be collected and stored in the CSP offices before it was sent to the FSB in Sochi. Each athlete was also given instructions to provide a photograph or text to the CSP of the sample number of any doping control sample collected at Sochi.

The IP investigation recovered the original Excel spreadsheet and conducted a forensic examination of the metadata. The data revealed that the schedule had been created in February 2014, contemporaneous to the Sochi Games and that the author was Alexey Velikodniy of the CSP. He was the Deputy to Rodionova. The original spreadsheet was titled "Duchess," which incidentally coincides with the nickname given to the steroid cocktail that the CSP was giving to the athletes (see Chapter 3).

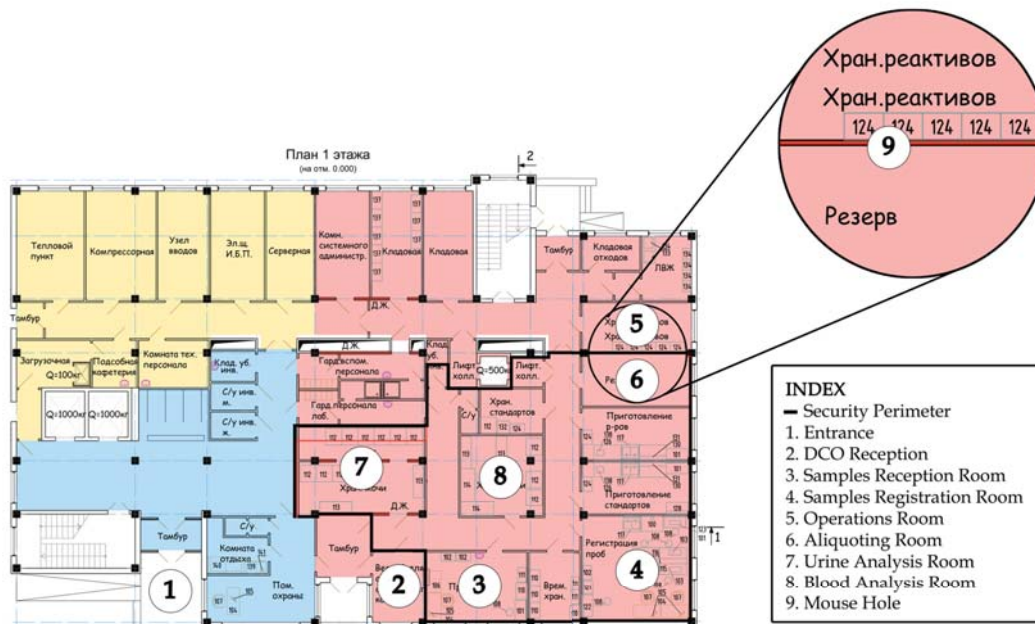
There were other athletes, not included on the spreadsheet, who were also protected by the sample swapping schemes of the State Programme. These athletes were communicated to Dr. Rodchenkov to be protected on an *ad hoc* basis throughout the Sochi Games. While the *ad hoc* athletes benefited from the concealment of their positive samples at the laboratory level and provided clean urine to the Laboratory, this urine was not able to be pretested by Dr. Rodchenkov, like the urine of those athletes on the spreadsheet. There were no positive samples at the Sochi Games from any Russian athletes.

5.2.3 IP Findings

1. A pre-selected group of Russian athletes competing at Sochi were protected by the Sochi sample swapping methodology.
2. Russian officials knew that Russian athletes competing at Sochi used doping substances.

5.3 The Mechanics of Sample Swapping

The IP has reproduced a copy of the architectural plans for the first floor of the Sochi Laboratory where the analytical bench work on doping samples was conducted.



Number 1-9 and magnification were added to this architectural plan by the IP.

5.3.1 Identification of the Incoming Sample

The following process is described in the evidence of Dr. Rodchenkov.

A protected athlete's sample would be collected in the presence of a Doping Control Officer ("DCO") at the particular event venue. The athlete would seal the bottles, complete the DCF, and subsequently take a picture of the bottle sample number. The information was then transmitted to Rodionova. She would communicate this information by phone or text to Dr. Rodchenkov signaling to Dr. Rodchenkov that the urine needed to swapped out of that bottle.

All athletes' samples were consolidated into shipment lots at the Olympic Village by RUSADA's Doping Control Manager, Evgeny Antilsky. Russian athletes' samples were always scheduled in the late day shipment to the Laboratory. Antilsky would notify Evgeny Kurdyatsev, Head of the Registration and Biological Sample Accounting Department in the Laboratory that the protected athletes' samples were being delivered to the Laboratory.

5.3.2 Movement of Sample within the Laboratory to the Aliquoting Room

Kurdyatsev waited at the Laboratory reception centre for the samples to arrive. Subsequently, he completed the usual sample reception documentation including confirmation of chain of custody, unpacked the samples and placed A and B bottles on separate mobile carts capable of holding trays of samples.

Kurdyatsev would take the B samples to the long-term storage room, and remove the protected athletes B samples and slip those samples into his lab coat pocket. He would transport the A samples to the aliquoting room.

5.3.3 Bottle Passing & Opening

At a convenient moment, usually around midnight when no one else was in the room, Kurdyatsev would pass the protected athletes A and B samples through

the mouse hole in the aliquoting room to the operations room where Dr. Rodchenkov and others were waiting.

Once the samples were passed through, they were given to FSB Blokhin, who had a security clearance to enter the laboratory under the guise of being a sewer engineer employed by engineering company Bilfinger. Below is screen shot of the list of individuals with security clearance to enter the Sochi Laboratory. Evgeny Blokhin's name is highlighted:

Список сотрудников с правом входа в АДЛ г.Сочи В алфавитном порядке/List of the personnel entering the Lab - Alphabetical

52	Чистякова И.А.	Специалист	Chistyakova	Inga	Specialist
53	Шаломова Е.Е.	Инженер-исследователь	Shalomova	Ekaterina	Engineer-researcher
54	Шестакова К.М.	Лаборант-регистратор	Shestakova	Kseniya	Assistant Registrar
55	Якунина Н.Ю.	Инженер-исследователь	Yakunina	Natalya	Engineer-researcher
56			Agon	Vanessa	(Sydney, Australia)
67			Piper	Thomas	(Cologne, Germany)
68			Robinson	Neil	(Lausanne, Switzerland)
69			Raul	Nicoli	(Lausanne, Switzerland)
70			Thevis	Mario	(Cologne, Germany)
71			Thomas	Andreas	(Cologne, Germany)
72			Van Eenoo	Peter	(Gent, Belgium)
73			Zhang	Lisi	(China)
74	Антипин Виталий Алексеевич	Техник	Antipin	Vitaly	ООО "Билфингер ХСГ ФМ" Technician Buidling care
75	Артеев Сергей Исидорович	Техник	Arteev	Sergey	ООО "Билфингер ХСГ ФМ" Technician Buidling care
76	Барабанов Александр	Уборщик	Barabanov	Aleksandr	УК ООО "Атмосфера" Cleaning and cathering
77	Блохин Евгений Николаевич	Инженер водопрод/канализация	Blokhin	Evgeny	ООО "Билфингер ХСГ ФМ" Engineer Piping Buidling care
78	Божко Максим Михайлович	Техник	Bozhko	Maksim	ООО "Билфингер ХСГ ФМ" Technician Buidling care
79	Жуков Алексей Николаевич	Инженер энергетик	Zhukov	Aleksey	screeno

The IP has modified the staff entry list to highlight FSB Blokhin as having security clearance to enter the Laboratory.

FSB Blokhin would take the B sample bottles away and return up to two hours later with the caps removed. FSB Blokhin also brought the athletes' clean urine from the FSB building to the laboratory.

No laboratory personnel ever witnessed the FSB's method for removing the caps of the bottles. In order to verify that the caps of the bottles were removed the IP conducted its own experiment. The IP is satisfied that the caps of the bottles can be removed and the caps were not counterfeit.

5.3.4 Doctoring the Replacement Urine in the Operational Room

With the protected athlete's clean urine and the B sample bottle cap removed, Dr. Rodchenkov and his team would go to work on the samples in the dead of night when there was little activity in the laboratory.

The athlete's dirty urine was disposed of. The protected athlete's clean urine sample was adjusted for SG by the addition of table salt or distilled water. This step was necessary to ensure that the swapped clean sample had a SG that was as close as possible to the SG recorded on the DCF at the time the original sample was collected from the athlete.

5.3.5 Swapped Sample Return to the Aliquoting Room

After any adjustments to the clean sample were made, the caps would be replaced on the B bottles and the A and B bottles for each athlete would be

passed back through the mouse hole in the wall. The bottles would be received in the aliquoting room. The standard laboratory procedure was later conducted on the swapped samples as with all other samples.

5.4 Results of the Sochi Investigation

5.4.1 Bottle Tampering Analysis

Using the spreadsheet of the protected athletes, certain Russian medal winners identified by the IP and other information provided by Dr. Rodchenkov, the IP developed a list of 95 urine samples for further analysis as directed by the IP. These samples were removed from the Lausanne Laboratory where they were stored after the Sochi Games and transported to the London Laboratory.

A representative set of 11 B bottles was randomly selected for examination by the IP scratches and marks expert. The expert confirmed that all 11 samples had scratches and marks on the inside of the bottle caps representative of the use of a tool used to open the cap. Thus, of the representative set of samples that the IP suspected of having been swapped, 100% of the bottles have evidence of tampering.

The IP was able to verify that the bottles were not counterfeit. The scratches and marks expert also demonstrated, in the presence of the Professor Richard

McLaren, how to assess that scratches and marks were indeed on the inside of the caps by observing the difference in depth between the outside and inside of the cap through the microscope.

The IP investigators were not able to confirm the presence of Dr. Rodchenkov's fingerprints or DNA on any of the B sample bottles.

5.4.1.1 IP Findings

1. The precise method used by the FSB to open the Sochi sample bottles is unknown. The IP experts conclusively established that the caps can be removed and reused later.
2. Every sample bottle the IP investigation team examined revealed evidence of tampering consistent with the caps being removed and reused.

5.4.2 Urine Analysis

Dr. Rodchenkov's evidence was that dirty urine samples had been swapped with clean urine. To test this hypothesis, the IP selected 32 sample bottles based on their SG levels and/or the existence of scratches and marks for urine examination. This selection of samples for examination was carried out in the

presence of Beckie Scott Athletes' Representative on the WADA Foundation Board and Claudia Bokel, the Elected Athletes Representative to the IOC. They were asked to randomly select an additional 8 A samples for inclusion in the testing process.

The DCC analyzed these 40 A samples and found 6 to contain quantities of salt significantly exceeding the levels produced by the human body, absent a serious life threatening medical condition.

Of these 6 samples, two were amongst the B sample bottles that the IP's expert confirmed were tampered with. While the athletes' identities are being kept confidential at this stage, both were medal winners at Sochi.

In Chapter 3, it was explained that one individual athlete gave 3 samples of urine at Sochi and another sample in the Autumn of 2014 which was stored at the Moscow Laboratory and later removed by WADA. These 3 Sochi samples had the same DNA as expected, since Dr. Rodchenkov's evidence is that dirty Sochi samples were replaced with clean urine from the same athlete. However, the DNA in the 2014 sample was found to come from a different person. This was consistent with Dr. Rodchenkov's evidence that the clean urine used to swap the 2014 samples came from other people.

5.4.2.1 IP Findings

1. The Laboratory analytical analysis has established that some samples had salt levels in excess of what can be found in a healthy human urine analysis, thereby confirming interview evidence that salt had been added.

Chapter 6: Other Sporting Events

6.1 Introduction

The Disappearing Positive Methodology was effective so long as the sample analysis could be done at the Moscow Laboratory. This system however was inadequate when doped athletes were sent to events with the presence of international observers. The IP is aware that the London 2012 Games, the 2013 IAAF World Championships and the 2013 World University Games presented challenges to the State run system. As a consequence, other tactics had to be deployed. In some cases, such as during the IAAF Championships and the University Games, a hybrid system was used.

6.2 London 2012 Olympic Games

In a classical doping cover up scheme, samples are collected pre-competition to determine whether an athlete will test positive at an upcoming competition and should therefore be kept at home. Those samples are not collected in official anti-doping bottles and results are not reported into ADAMS or to the anti-doping authorities. This is the scheme that was in place prior to the IAAF Championships. For the London Games however, a variation of this approach was used, but the purpose remained the same.

Before the London Games, the pre-competition samples were collected in official doping control bottles. The analytical results were reviewed by the Moscow Laboratory to determine the likelihood that an athlete was in danger of testing positive at the Games. That likelihood was characterised by Dr. Rodchenkov as either red where the athlete was going to test positive at the Games and should be replaced; yellow, meant the sample still showed traces of PEDs, but should be clear in time for the Games; and green meant the athlete was cleared to go to the Games.

In preparation for London most of the Russian pre-testing samples were reported into ADAMS. The Moscow Laboratory the Disappearing Positive Methodology was used falsifying results to show positives as negatives. This had the same effect as if the results had not been reported at all.

In addition to the scheme described above, Dr. Rodchenkov was able to advise the MofS on the PEDs that would have the least likelihood of detection during the London Games. Dr. Rodchenkov's "cocktail" of the steroids Oral Turinabol, Oxandrolone and Methasterone was administered to athletes prior to the London Games. Meanwhile, EPO also used in micro doses until two weeks before departure to reduce the possibility of detection by the Athlete Blood Passport program. Dr. Rodchenkov would later to tell Minister Mutko that if the London samples were ever reanalysed, the Russian Team would be in trouble and

predicted that Oral Turinabol, Oxandrolone, Methasterone, Drostanolone and GW1516 would be found to be present. Dr. Rodchenkov also wrote a report (see attached Exhibit) to the FSB expressing that same conclusion.

Some of the pre-testing which took place before the London Games is reflected on an Excel spreadsheet obtained from the dossier provided at the Los Angeles meeting, which identified 46 Russian athletes, their sample numbers, and the PEDs found in their samples. These tests were mainly conducted during the period of 17-22 July 2012 and provide a basis for Dr. Rodchenkov to label a potential Russian Olympic athlete as red, yellow, green. The IP examined the schedule of pre London 2012 testing and the authenticity of the schedule was confirmed through metadata analysis.

For the purpose of illustrating the impact of these tests, the IP has published an extract of the schedule in chart format below. On the left hand side of the chart are the number of samples involved taken from the 46 athletes. The middle column details the screening test results found by the Moscow Laboratory and the final column details the result reported in ADAMS. The name of the Russian athlete which is shown on the actual schedule has not been included so as not to identify any athlete in advance of any potential results management action.

The chart shows that the Laboratory detected extremely high levels of prohibited substances. With one exception, every positive result was reported as negative findings on ADAMS.

Sample No.	Results	ADAMS Results
1	desoxymethyltestosterone (Madol) traces	Negative findings
2	oralturinabol (DHCMT) 150,000, oxandrolone (Anavar) 20,000	Negative findings
3	oralturinabol 450,000	Negative findings
4	oralturinabol 45,000	Negative findings
5	methasterone 140,000, oralturinabol 20,000, desoxymethyltestosterone 20,000	Negative findings
6	T/E = 10, desoxymethyltestosterone 40,000	Negative findings
7	cannabimimetics JWH-018 (200,000), nandrolone 1 ng/ml, oralturinabol 12,000	Negative findings
8	desoxymethyltestosterone 300,000	Negative findings
9	methasterone 14,000; drostanolone 1,800,000	Negative findings
10	methasterone 140,000; oralturinabol 350,000; oxandrolone 6,000; desoxymethyltestosterone 25,000	Negative findings
11	desoxymethyltestosterone 25,000	Negative findings
12	methasterone 230,000; oralturinabol 10,000; desoxymethyltestosterone 30,000	Negative findings
13	T/E = 4.2; desoxymethyltestosterone 120,000	Negative findings
14	oxandrolone 200000	Negative findings
15	oralturinabol 10000, boldenone, 1-testosterone (5 ng/ml)	Negative findings

16	oxandrolone 20000, boldenone, 1-testosterone (5 ng/ml)	Negative findings
17	dehydroepiandrosterone (=DHEA), androsterone (500 ng/ml), boldernone (20 ng/ml)	Negative findings
18	methyltestosterone (5ng/ml)	Negative findings
19	oxandrolone 20000, oralturinabol 20000	Negative findings
20	dehydroepiandrosterone (=DHEA), nandrolone (3nd/ml)	Negative findings
21	clean, EPO analysis not finished	Negative Findings
22	boldenone 0.8ng/ml; 1-testosterone 1 ng/ml; methylhexaneamine 120 ng/ml	Negative Findings
23	boldenone 0.3 ng/ml; 1-testosterone 0.3 ng/ml; methylhexaneamine 60 ng/ml	Negative Findings
24	boldenone 0.4 ng/ml; 1-testosterone 0.6 ng/ml; methylhexaneamine 90 ng/ml	Negative Findings
25	boldenone 0.6 ng/ml; 1-testosterone 0.7 ng/ml	Negative Findings
26	boldenone 1 ng/ml; 1-testosterone 20 ng/ml	Negative Findings
27	methasterone 20,000; oralturinabol 3,500	Negative Findings
28	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
29	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
30	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
31	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
32	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
33	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
34	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
35	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
36	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
37	oralturinabol 740,000	Negative Findings

38	oralturinabol 20,000	Negative Findings
39	oralturinabol 4,000	Negative Findings
40	oralturinabol 200,000; oxandrolone 5,000	Negative Findings
41	T/E = 4.2	Negative Findings
42	EPO analysis ordered, nor finished	Negative Findings
43	EPO analysis ordered, nor finished	Negative Findings
44	EPO analysis ordered, nor finished	Negative Findings
45	EPO analysis ordered, nor finished	Negative Findings
46	EPO analysis ordered, nor finished	Negative Findings
47	T/E = 6	ATF / T/E ratio > 4 (R) - S1.1B Endogenous AAS
48	methasterone 25,000; drostanolone 3,600,000	Negative Findings
49	T/E = 4; desoxymethyltestosterone 60,000	Negative Findings
50	probably dehydroepiandrosterone, EPO analysis ordered, nor finished	Negative Findings
51	EPO analysis ordered, nor finished	Negative Findings
52	EPO analysis ordered, nor finished	Negative Findings
53	EPO analysis ordered, nor finished	Negative Findings
54	oralturinabol 15,000	Negative Findings
55	nandrolone 3 ng/ml; oralturinabol 50,000; oxandrolone 8,000	Negative Findings
56	oralturinabol 4,000	Negative Findings
57	methasterone 90,000; oralturinabol 12,000; desoxymethyltestosterone 10,000	Negative Findings
58	methasterone 160,000; oralturinabol 400,000; oxandrolone 5,000; desoxymethyltestosterone 15,000	Negative Findings

59	oralturinabol 590,000	Negative Findings
60	oxandrolone 12,000	Negative Findings
61	oxandrolone 19,001	Negative Findings
62	oralturinabol 45,000; oxandrolone 1,800	Negative Findings
63	oralturinabol 30,001	Negative Findings
64	methyltestosterone 30,000	Negative Findings
65	oralturinabol 4,000; boldenone 8,000 (0.6 ng/ml); 1-testosterone 15,000 (2 ng/ml)	Negative Findings
66	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
67	EPO analysis ordered, nor finished, the rest is clean	Negative Findings
68	EPO analysis ordered, nor finished, the rest is clean	Negative Findings

6.2.1 The IOC Re-Testing of Results of the London 2012 Olympic Games

In June 2016, the IOC ordered retests of samples obtained during the London Games. From those retests, 8 Russian athlete A samples were positive for Oral Turinabol, with one also positive for Drostanelone and another for GW1516. This supports Dr. Rodchenkov's evidence that Russian athletes were using his "cocktail" before the London Games. Additionally, the names of two of the athletes who tested positive as a result of the IOC retest are also shown on the London pre-testing schedule discussed above as positive for the same substances discovered in the retest. This corroborates both Dr. Rodchenkov's account of the scheme and the accuracy of the original schedule.

The IP checked the names of the 46 athletes against London Games' medal winners. Eleven of these athletes won medals at the Games. A number of these medal winners have subsequently been banned for PED abuse and their medals stripped.

6.3 World University Games, Kazan 2013

The World University Games was held in Kazan, Russia from 7-16 July 2013. The Russian Federation did extremely well, winning 292 medals overall. A variation of the Disappearing Positive Methodology was used prior to the University Games. The IP has recovered Excel spreadsheets with lists of positive results from sample tests and which athletes should be saved or quarantined.

A metadata examination of the University Games spreadsheet confirms its authenticity. The spreadsheet identifies 32 athletes along with the substances discovered in their samples. Of these, 17 are Russian competitors. In each of these cases, the instruction from the MofS to the Laboratory is to SAVE. In two cases the instruction is to "allow" but also to "warn the Federation." The remaining cases involve 15 foreign athletes; and for each of these, the instruction is to QUARANTINE. Dr. Rodchenkov's evidence is that some sample swapping also occurred in connection with the University Games. No further information

was available to the IP in relation to the University Games. However, further investigation may identify additional examples.

6.4 2013 Moscow IAAF World Championships (“Moscow Championships”)

The IC reported extensively on the issues surrounding the Moscow Championships. As a result of the IP investigation, new documentary evidence and witness testimony was assessed and enabled the IP to conduct a more in depth review of the evidence.

According to Dr. Rodchenkov, the lessons learned from the pre-competition testing prior to the London Games resulted in using the classical doping scheme described above, given that there existed a high risk that pre-competition samples would be reanalyzed by a third party such as WADA.

In advance of the World Championships, Russian athletes provided their urine to the laboratory for analysis in unofficial bottles or containers. This way an assessment could be made of an athlete’s viability to compete without reporting any samples in ADAMS.

During the competition, protected athletes’ sample numbers from their DCF would be texted or phoned through to the Moscow Laboratory. It was clear to the laboratory personnel that under no circumstances were samples from these

athletes to be reported as positive. A total of 8 protected athlete names were available to the IP for further investigation. Some of these athletes have now been banned for other doping activity and some athletes feature in the London 2012 pre-testing, and in relation to the Disappearing Positive Methodology.

Any other detected positives were referred up through the Liaison person for a decision on SAVE or QUARANTINE by the MofS. This has been referred to as the Disappearing Positive Methodology as discussed in Chapter 3. It should be noted that all foreigners with positive screens were quarantined. Finally, after the completion of the Moscow Championships, the Laboratory held a number of positive samples that needed to be swapped by removing the cap and replacing the athlete's dirty urine before the samples were shipped to another laboratory as instructed by the IAAF.

Chapter 7: Summary of Findings

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.

Findings with respect to Witnesses

1. Dr. Rodchenkov, in the context of the subject matter within the IP mandate, was a credible and truthful person.

2. All other witnesses interviewed by the IP investigative team were credible. Their evidence was only accepted where it met the standard of beyond a reasonable doubt.
3. The Moscow Laboratory personnel did not have a choice in whether to be involved in the State directed system.

Findings with respect to Moscow Laboratory

1. The Moscow Laboratory operated under State directed oversight and control of its anti-doping operational system.
2. The Moscow Laboratory personnel were required to be part of the State directed system that enabled Russian athletes to compete while engaged in the use of doping substances.
3. The Moscow Laboratory was the final failsafe protective shield in the State directed doping regime.
4. Sample bottles stored in the Moscow Laboratory from 10 September to 10 December 2014 were tampered with by having their urine swapped.

5. The Disappearing Positive Methodology was planned and operated over a period from at least late 2011 until August 2015.
6. Russian athletes from the vast majority of summer and winter Olympic sports benefited from the Disappearing Positive Methodology.

Findings with respect to the Sochi Laboratory

1. The planning for the unique Sochi Laboratory sample swapping involved the Ministry of Sport, FSB, CSP, and the Moscow Laboratory.
2. A pre-selected group of Russian athletes competing at Sochi were protected by the Sochi sample swapping methodology.
3. The Laboratory analytical analysis has established that some samples had salt levels in excess of what can be found in a healthy human urine analysis, thereby confirming interview evidence that salt had been added.
4. Every sample bottle the IP investigation team examined revealed evidence of tampering consistent with the caps being removed and reused.

5. The DNA analysis confirmed 3 samples where the DNA did not match that of the athlete.

Findings with respect to the Ministry of Sport

1. The Ministry of Sport made the determination as to which athletes would be protected by the Disappearing Positive Methodology.
2. The Deputy Minister of Sport in his discretion made the save or quarantine order.
3. Russian officials knew that Russian athletes competing at Sochi used doping substances.

Findings with respect to the FSB

1. The precise method used by the FSB to open the Sochi sample bottles is unknown. The IP experts conclusively established that the caps can be removed and reused later.